

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE EASTERN DISTRICT OF TEXAS
3 MARSHALL DIVISION

3 SIMPLEAIR, INC. * Civil Docket No.
4 VS. * 2:11-CV-416
* Marshall, Texas
5 *
* January 14, 2014
6 MICROSOFT CORPROATION, ET AL * 1:00 P.M.

7 TRANSCRIPT OF JURY TRIAL
8 BEFORE THE HONORABLE JUDGE RODNEY GILSTRAP
9 UNITED STATES DISTRICT JUDGE

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12 P R O C E E D I N G S

13 (Jury out.)

14 COURT SECURITY OFFICER: All rise.

15 THE COURT: Be seated, please.

16 All right. Before we bring in the jury,
17 counsel were going to meet and confer over the lunch
18 hour on a matter.

19 Is there anything to report to the Court?

20 MR. EICHMANN: Yes, Your Honor. May I
21 approach?

22 THE COURT: You may.

23 MR. EICHMANN: We've reached an
24 agreement. We've confirmed that we're not calling
25 Mr. von Kaenel in our case-in-chief. The only time we
might call him would be in rebuttal, if they present

1 their challenge to their priority date, which they don't
2 think they're going to do.

3 With those stipulations, as well as our
4 agreement that they can go outside the scope in
5 cross-examining Mr. Payne, we have agreement from Google
6 that Mr. von Kaenel can stay in the courtroom, and he's
7 now seated in the gallery right there.

8 THE COURT: Is that the Defendants'
9 agreement?

10 MR. STOCKWELL: That's correct, Your
11 Honor.

12 THE COURT: All right. Then Mr. von
13 Kaenel is released from the Rule by agreement.

14 Anything else before I bring the jury
15 back in?

16 MR. EICHMANN: No, Your Honor.

17 THE COURT: And we're ready to proceed
18 with deposition clips; is that right, Mr. Dovel?

19 MR. DOVEL: That's right, Your Honor.

20 THE COURT: Okay. Bring the jury in,
21 please, Mr. Floyd.

22 COURT SECURITY OFFICER: Yes, sir.
23 All rise for the jury.

24 (Jury in.)

25 THE COURT: Welcome back from lunch,

1 ladies and gentlemen. Please be seated.

2 All right. Is the Plaintiff prepared to
3 call their next witness?

4 MR. DOVEL: Yes, we are, Your Honor. We
5 call Francesco Nerieri through videotape.

6 THE COURT: All right. You may proceed.
7 (Video clip playing.)

8 QUESTION: Sir, can you state your name?

9 ANSWER: My name is Francesco Nerieri.

10 QUESTION: Who do you work for?

11 ANSWER: Google.com.

12 QUESTION: What work falls within your
13 responsibilities?

14 ANSWER: I manage a team that works on
15 services for Android.

16 QUESTION: In 2010, Google introduced the
17 Cloud to Device Messaging service for third-party
18 application developers, right?

19 ANSWER: Correct.

20 QUESTION: And in 2012, that service was
21 deprecated and replaced with the Google Cloud Messaging
22 service, right?

23 ANSWER: Correct.

24 QUESTION: And that service is still in
25 operation today, right?

1 ANSWER: Correct.

2 QUESTION: Are there different servers
3 that are used for the GCM as compared to the C2DM?

4 ANSWER: The servers that we use for GCM
5 and C2DM are the same.

6 QUESTION: When Google introduced the
7 C2DM service to third-party application developers in
8 2010, the service made use of a backend server, right?

9 ANSWER: Okay.

10 QUESTION: Correct?

11 ANSWER: Yes.

12 QUESTION: That same server or set of
13 servers is used for not just the C2DM but also the
14 Google Cloud Messaging service?

15 ANSWER: I believe so.

16 QUESTION: And do those backend servers
17 process the information, the data that's been received,
18 in the same way for both the C2DM and the GCM?

19 ANSWER: I believe so. There's been some
20 refactoring, but to my knowledge, yes.

21 QUESTION: Before Google opened up the
22 Cloud to Device Messaging service to third-party
23 application developers --

24 ANSWER: Uh-huh.

25 QUESTION: -- third-party application

1 developers were still able to send messages to
2 applications on the Android phone, right?

3 ANSWER: Correct.

4 QUESTION: One way they could do that is
5 if the application would maintain a persistent
6 connection between the device and the application
7 server, right?

8 ANSWER: Correct.

9 QUESTION: And the other way was if the
10 application would not maintain a persistent connection
11 but would open a connection up to the application
12 server, access or download the information it needed,
13 and then close out the connection, right?

14 ANSWER: That's another way.

15 QUESTION: Whenever an Android phone
16 makes a connection to a server, such as a third-party
17 application server, that requires the use of the CPU and
18 the radio on the phone, right?

19 ANSWER: Correct.

20 QUESTION: Those two things draw on the
21 battery, right?

22 ANSWER: Again, you're correct.

23 QUESTION: If an Android phone has five
24 applications installed and wants to receive notification
25 messages for each of those applications, it can receive

1 the messages through the GCM and the connection between
2 the mobile connection server and the phone, right?

3 ANSWER: Correct.

4 QUESTION: Messages for each of those
5 five different applications, right?

6 ANSWER: Correct.

7 QUESTION: The phone doesn't have to
8 maintain five separate connections to each of the five
9 different application provider servers, right?

10 ANSWER: Correct.

11 QUESTION: If a third-party application
12 provider wants to send a message through the Google
13 Cloud Messaging service, not just send a request, but
14 actually send a request, have a message be processed and
15 delivered to the Android phone, that application
16 provider must have an API key, right?

17 ANSWER: So for a third-party application
18 to have the message delivered to the phone, they must
19 have a valid API key.

20 QUESTION: Only Google can provide a user
21 or a third-party application developer with a valid API
22 key, right?

23 ANSWER: API keys are generated by Google
24 upon developer or user clicking on generate an API key.

25 QUESTION: They can't just make one up

1 themselves, right?

2 ANSWER: A user cannot generate an API --
3 a valid Google API key themselves.

4 QUESTION: Only Google can generate that,
5 right?

6 ANSWER: Google servers generate Google
7 API keys.

8 QUESTION: If a third-party application
9 developer wanted to successfully use the C2DM service to
10 send a message to an Android phone, they would have to
11 have a valid client log-in token?

12 ANSWER: To successfully deliver a C2DM
13 message, you need to authenticate your request with a
14 valid client log-in token.

15 QUESTION: It's the Google servers that
16 generate the client log-in token, right?

17 ANSWER: So to generate a Google client
18 log-in token from Google log-in credentials, yes, it is
19 generated from the Google servers.

20 QUESTION: What is the registration ID
21 that you're referring to?

22 ANSWER: It's another token that the
23 third-party service needs to provide us.

24 QUESTION: How do they get that token?

25 ANSWER: To get a registration ID, an

1 application on an Android device needs to request one.

2 QUESTION: How does that happen?

3 ANSWER: The application code on Android
4 needs to perform the call register to the GCM framework
5 on an Android device.

6 QUESTION: For the C2DM, did the
7 application developer also need to have a registration
8 ID and include that in their request to the frontend
9 server?

10 ANSWER: For C2DM, the third-party server
11 also needs a -- a registration ID, yes.

12 QUESTION: What is contained within the
13 registration ID?

14 ANSWER: So as we were discussing before,
15 there's the sender ID, so we can match the API key.
16 There is an identifier of the device called Android ID.
17 There's an identifier of the application, which is the
18 Java package name of the application on an Android
19 device. There is a certificate, which refers to a
20 signature of the application. There is also a
21 timestamp.

22 QUESTION: When a third-party application
23 developer makes a connection to the frontend server, the
24 frontend server will check to see if that application
25 developer has a valid client log-in token in the case of

1 the C2DM or a valid API key in the case of the GCM; is
2 that right?

3 ANSWER: So for C2DM, when -- when the
4 data messaging frontend server receives a request to
5 deliver a message, it would check if there is a -- a
6 client log-in token, and that client log-in token is
7 valid.

8 For GCM, when a third-party server wants
9 to deliver a message to an Android device successfully
10 via the data messaging frontend server, then we would
11 check -- data messaging frontend server would check from
12 the header if the API key is valid.

13 QUESTION: After the Google frontend
14 server checks to see if the application developer has a
15 valid API key in the case of the GCM or a valid client
16 log-in token in the case of the C2DM, what's the next
17 thing that occurs at the frontend server?

18 ANSWER: Well, to check whether the API
19 key -- stick to GCM now -- is valid, the third-party
20 developers also needs to provide a registration ID. And
21 so to check the validity, we have to check it against
22 the registration ID.

23 QUESTION: When the data message server,
24 the frontend server, receives a request from a
25 third-party application developer, it will check to see

1 whether the developer has a valid API key and a valid
2 registration ID?

3 ANSWER: When we receive the request,
4 when the data messaging server -- frontend server
5 receives the request, it will check whether the API key
6 matches that information in the registration ID so that
7 the sender who he is says he is.

8 QUESTION: After it's determined that the
9 registration ID is valid, at that point, does the
10 frontend server send the request to the data messaging
11 service backend server?

12 ANSWER: So if you are talking about GCM
13 only?

14 QUESTION: Yes.

15 ANSWER: After the registration ID check
16 has been validated, if it's still in the frontend, then
17 the request is sent to the backend.

18 QUESTION: And what happens once that
19 reaches the GCM backend?

20 ANSWER: Well, then the backend accepts
21 the message and the registration ID.

22 QUESTION: And what does the backend do
23 at that point?

24 ANSWER: So once the backend receives the
25 message, the request, as I -- as I was telling you

1 before, it might happen that now it does the check on
2 the registration ID, whether it is valid.

3 But let's say that that's past, and so it
4 sends the message to the Buzz router, as you can see
5 from the other arrow, to Buzz.

6 QUESTION: When a Google application or
7 service sends data using an RPC call to the GCM backend,
8 what happens at the GCM backend when that data arrives?

9 A. So the first-party server involves an RPC call
10 with the message payload and the registration ID, and
11 the GCM backend then verifies the registration ID and --
12 and invokes an RPC call to the Buzz system with the
13 registration ID and then -- and the message payload, as
14 discussed before, for the first-party server -- for the
15 third-party servers. Sorry.

16 QUESTION: Does the GCM backend also
17 invoke an RPC call to transmit the payload and
18 registration ID to the Buzz router?

19 ANSWER: The GCM backend invokes an RPC
20 call with the payload and the registration ID to the
21 Buzz router. Yes.

22 QUESTION: And when that information is
23 received at the Buzz router, what occurs?

24 ANSWER: When the Buzz router receives
25 the registration ID and the payload, then it matches the

1 Android ID contained in the registration ID with an MCS
2 end point. So it invokes an RPC call to the MCS end
3 point with the payload.

4 QUESTION: Okay. How is it that the Buzz
5 router can send just the payload to the MCS and the MCS
6 then knows which device it's going to send the message
7 to?

8 ANSWER: So the Buzz router sends the
9 payload to an MCS end point.

10 QUESTION: Are you saying that when the
11 Buzz router makes the transmission to the MCS it's
12 sending it to a particular MCS end point that is
13 dedicated solely to one connection to one Android phone?

14 ANSWER: Correct.

15 QUESTION: And how does the Buzz router
16 address that transmission to that particular end point?

17 ANSWER: So if you recall, the GCM
18 backend sends the payload and the reg. ID, the reg. ID
19 contains the Android ID. The Android ID is the key to
20 find the end point.

21 QUESTION: In what way is it the key to
22 find the end point?

23 ANSWER: Well, the Buzz router knows the
24 Android ID, end point.

25 QUESTION: What is the mobile connection

1 server and how does it relate to the Google Cloud
2 Messaging for Android service?

3 ANSWER: The Mobile Connection Server is
4 the service that an Android device connects to to keep
5 the persistent connection open.

6 QUESTION: The Android phone will send a
7 heartbeat to the Mobile Connection Server to keep open
8 the connection between itself and the Mobile Connection
9 Server; is that right?

10 ANSWER: Yes.

11 QUESTION: How frequently does the
12 Android phone send a heartbeat signal to the Mobile
13 Connection Server?

14 ANSWER: It does sometimes every 30
15 minutes.

16 QUESTION: When a message is sent from
17 the Google Cloud Messaging service to an Android phone,
18 will that message always be sent through the connection
19 maintained between the device and the Mobile Connection
20 Server?

21 ANSWER: Correct.

22 QUESTION: When a message from the Google
23 Cloud Messaging service or C2DM service is sent to an
24 Android smartphone or tablet, that transmission is
25 actually made by the Mobile Connection Server that the

1 phone or tablet is connected to, right?

2 ANSWER: So Mobile Connection Server,
3 once it receives a message, whatever the nature -- in
4 this case, from GCM or C2DM, will send it down to the
5 device via the TCP connection.

6 QUESTION: What are the differences on
7 how the GCM backend Buzz router and Mobile Connection
8 Server operate when this call flow shown on GCM
9 architecture internal projects is used, rather than the
10 one on the prior place for external projects?

11 ANSWER: There is no change. There are
12 no changes.

13 QUESTION: It's the same process that we
14 went through?

15 ANSWER: The first-party process after
16 the backend is the same exact process as the third-party
17 service.

18 QUESTION: And the first thing on the
19 device that receives the data is simply the antenna,
20 right?

21 ANSWER: The serialized bits, as you
22 define this data, the -- the serialized device, yes, it
23 must go through the radio, I believe.

24 QUESTION: The CPU component is the
25 central processing unit within the Android devices,

1 right?

2 ANSWER: The CPU is a central processor
3 unit.

4 QUESTION: All the Android -- all the
5 Android phones and tablets have central processing
6 units, right?

7 ANSWER: I suspect that every device that
8 runs Android has a CPU.

9 QUESTION: And the Android operating
10 system is executed by the CPU, right?

11 ANSWER: Operations and -- and bit
12 translations are -- are operated by CPU, which is the
13 role of CPU.

14 QUESTION: GMS contains the GSF, Google
15 Services Framework, and within Google Services
16 Framework, is the Google Cloud Messaging client
17 component?

18 ANSWER: Yes, so the GCM APK, if it's an
19 APK, contains the GSF APK, which contains the code for
20 the GCM client.

21 QUESTION: When the data arrives at the
22 GCM client on the Android phone or tablet, what occurs
23 at that point?

24 ANSWER: So when the GCM client receives
25 a message, he transforms it into an intent, which is a

1 Java object for Android, and the intent is broadcasted
2 to the application.

3 QUESTION: When an application is running
4 in the foreground, that means the application is not
5 only running, but is opened and displayed to the user on
6 the interface, right?

7 ANSWER: When an application on Android
8 runs in the foreground, it means that -- in an -- on an
9 Android runs in the foreground. It means the user
10 interface is visible on display to the user and the
11 application is running.

12 QUESTION: And what does it mean for an
13 application on the Android smartphone or tablet to be
14 running in the background?

15 ANSWER: You know, on an Android
16 smartphone, if an application runs in the background, it
17 means that some memory is allocated to the application,
18 but there is no user interface visible to the user. I
19 guess that's it.

20 QUESTION: Generally, there are three
21 different states an application on an Android smartphone
22 can be in, running in the foreground, running in the
23 background, or not running at all; is that correct?

24 ANSWER: I -- I think so.

25 QUESTION: In each one of those states,

1 will the GCM client on the Android deliver the message
2 received from the Google Cloud Messaging Service to the
3 target application?

4 ANSWER: So if on an Android device, the
5 GCM client code receives a message and intends to
6 deliver it to the application, if the application is in
7 foreground, it receive it. If it's in the background,
8 it receives it. And if it's stopped, then the operating
9 system will start the service which contains the
10 broadcast receiver for GCM to receive the message.

11 QUESTION: In order to receive
12 notification messages from the Cloud to Device Messaging
13 service, the application on the Android phone does not
14 need to maintain a persistent connection to the
15 application developer servers, right?

16 ANSWER: If an application server sends a
17 message through C2DM, then the application on the device
18 for that particular message does not need to have a
19 connection on their own server.

20 QUESTION: If the application does
21 maintain a persistent connection to the application
22 server, they can still receive messages from the
23 application server that have been delivered by either
24 the C2DM or GCM, right?

25 ANSWER: So you're saying that if an

1 application has a persistent connection to their own
2 server and their server sends a message via GCM, the
3 application can still receive that particular message
4 via GCM?

5 QUESTION: Right?

6 ANSWER: That's correct.

7 QUESTION: And the same was true with
8 C2DM, right?

9 ANSWER: Yes, the same is true with C2DM.

10 QUESTION: It doesn't matter whether that
11 Android device is or is not connected to the third-party
12 application server. As long as they are able to receive
13 messages from the GCM or the C2DM, they can still
14 receive messages from that application server through
15 the service, right?

16 ANSWER: All right. So a third-party
17 application can send a message to an application on an
18 Android device using the GCM or C2DM service, yes. I --
19 I mean, that's all we have been discussing, in that way.

20 QUESTION: The Android phone maintains a
21 persistent connection to the mobile connection server at
22 Google, right?

23 ANSWER: Correct.

24 QUESTION: That's just one connection,
25 right?

1 ANSWER: Correct.

2 QUESTION: That single connection is used
3 to send messages from the GCM to the Android phone,
4 right?

5 ANSWER: That connection is a transfer
6 layer for also -- for messages that come from GCM.

7 QUESTION: Regardless of which
8 application provider originated the message, right?

9 ANSWER: So if a third-party application
10 sends a message to GCM, then eventually for that device,
11 that connection to MCS will be used to receive that
12 message.

13 QUESTION: It uses less CPU resources,
14 less radio resources, and less battery to establish and
15 keep open one connection between the Android phone and
16 the Google servers than multiple connections between the
17 Android phone and various application servers, right?

18 ANSWER: So we were comparing an
19 application on Android device opening their own
20 connection, and a connection open to GCM. Those
21 connections, draw the same battery. If you're comparing
22 multiple connections versus one, multiple draws more
23 battery than one.

24 QUESTION: On the first page of
25 Exhibit 36, in the chart titled GCM Daily Messages, we

1 see that for the most recent period, there are roughly
2 14 billion log entries per day, right?

3 ANSWER: Correct.

4 QUESTION: And that corresponds to
5 somewhere between 7 billion and 14 billion messages that
6 were sent on a particular day, right?

7 ANSWER: By -- 7 billion, a lower limit,
8 and 14 being an upper limit, but, yes.

9 QUESTION: Is this data inclusive of C2DM
10 requests and GCM requests?

11 ANSWER: Yes, this data includes every
12 single message request.

13 QUESTION: Is this divided by geo
14 location of the frontend servers?

15 ANSWER: No.

16 QUESTION: This is worldwide?

17 ANSWER: This is worldwide.

18 QUESTION: I'm going to mark as
19 Exhibit 39 a copy of Google's responses to SimpleAir's
20 second individual interrogatories served July 29th,
21 2013.

22 On Page 3 of Exhibit 39, there's an
23 individual Interrogatory No. 4 to Google. Tell me when
24 you're there, sir.

25 ANSWER: I'm there.

1 QUESTION: This interrogatory, to
2 paraphrase it, it asks Google to identify its
3 non-infringing alternatives to the SimpleAir '914
4 patent. And by that I mean different ways that Google
5 could design the -- the Cloud to Device Messaging
6 service or the Google Cloud Messaging service so that it
7 wouldn't infringe the '914 patent. Are you familiar
8 with the response that Google has provided to this
9 individual Interrogatory No. 4?

10 ANSWER: I am.

11 QUESTION: On Page 5, continuing on Page
12 6, Google identifies various examples of ways that it
13 could design or change the C2DM or GCM service to avoid
14 claims of infringement by SimpleAir. Do you see that,
15 sir?

16 ANSWER: Yes, I do.

17 QUESTION: Has Google ever considered any
18 of the alternatives listed on Page 5 and 6 here?

19 ANSWER: We did not consider alternatives
20 to the system we designed, not including these ones.

21 QUESTION: Including these ones, you
22 mean?

23 ANSWER: Yeah, including these ones.

24 QUESTION: Has Google ever considered
25 locating the servers for the Google Cloud Messaging

1 service exclusively outside of the United States so that
2 it could avoid infringing SimpleAir's patents?

3 ANSWER: So we considered and we did move
4 some servers, not exclusively all, to some other
5 countries, and we did, but that's because where the
6 capacity is. That's the only reason.

7 QUESTION: Has Google ever purposely
8 designed a service so that foreign servers will be used
9 to deliver data or messages to U.S. devices as a matter
10 of course, not just as a backup if a closer one goes
11 down?

12 ANSWER: Could be. I -- I don't know
13 about that.

14 QUESTION: Can you identify any time in
15 which that's ever happened?

16 ANSWER: I -- I just said could be. I
17 don't know about it.

18 QUESTION: That wasn't done in response
19 to this lawsuit, right?

20 ANSWER: I wasn't aware of this lawsuit,
21 so -- none of us were, so we did nothing in response to
22 this lawsuit.

23 (Videoclip ends.)

24 MR. DOVEL: Your Honor, our next
25 witness, via videotape deposition, will be Felipa Leme.

1 It should be about nine minutes.

2 THE COURT: All right. Proceed.

3 (Videoclip played.)

4 QUESTION: Would you please state your
5 name for the record?

6 ANSWER: My name is Felipe De Almeida
7 Leme.

8 QUESTION: What is your job?

9 ANSWER: I'm a software engineer.

10 QUESTION: Who do you work for?

11 ANSWER: Google.

12 QUESTION: I have in front of me a
13 presentation. It's Bates labeled GOOG_SS_69957 through
14 69973. It will be Exhibit 54. Are you familiar with
15 Exhibit 54?

16 ANSWER: Yes.

17 QUESTION: What is Exhibit 54?

18 ANSWER: That's -- these are the slides
19 for a presentation that I did at Google.

20 QUESTION: Who did you make this
21 presentation to?

22 ANSWER: It's -- there's a conference
23 internally called Mobile Week 2000 -- I think it was --
24 I'm not sure if it was 2013 or 2012, but I made this
25 presentation during this conference.

1 QUESTION: Okay. The second major step
2 here says registration. What is registration?

3 ANSWER: Registration, that's the process
4 I mentioned early on when I said actually was the first
5 step, but that's when the application running on a
6 particular device has to register itself with GCM so the
7 GCM assigns a registration ID which in turn can be used
8 to identify the -- that particular application running
9 on that particular device.

10 QUESTION: What does MCS stand for?

11 ANSWER: That's the Mobile Connection
12 Server I mentioned earlier when you asked me what
13 services I worked on.

14 QUESTION: So the device has a connection
15 to the Google Mobile Connection Server so that -- and
16 that's how Google knows whether or not the device is
17 connected or not; is that right?

18 ANSWER: That's right, yeah.

19 QUESTION: And then based on the
20 registration ID that's received from the third party,
21 Google knows which device to look for in terms of
22 whether or not it's connected or not; is that right?

23 ANSWER: The -- the registration ID, they
24 can -- we can -- I don't recall the exact details, but
25 basically there is a storage that says this registration

1 ID contains this -- it's a -- was assigned to this
2 Android ID, which is the identifier of the device. Then
3 they can say -- they can -- there is another table from
4 MCS where they say, okay, this device with Android ID is
5 connect to this particular IP address, so they do this
6 mapping.

7 QUESTION: So the fact that the GCM uses
8 the MCS connection for all of these different
9 third-party applications, that optimizes battery life;
10 is that correct?

11 ANSWER: Yes, I believe so.

12 QUESTION: Why would using the same MCS
13 connection rather than many different connections
14 improve battery life?

15 ANSWER: Because any connection, it's --
16 it's expensive resource. You need to keep socket open,
17 file system, so there -- there's -- there's many work
18 behind the scenes that operation system has to do, so
19 the less connections open you have, the less processing
20 power is -- processing is done by the CPU and system and
21 then that -- that means less battery utilization.

22 QUESTION: What does the GCM backend do?

23 ANSWER: The GCM backend, it will decide
24 if this -- they send a message right away, if the device
25 is connected or stored for later delivery.

1 QUESTION: If the device is not connected
2 and the GCM backend decides not to send a message right
3 away, then what happens?

4 ANSWER: Then it stores the message on
5 this Kansas database.

6 QUESTION: After the message goes to
7 Buzz, then what happens?

8 ANSWER: This particular -- prior to
9 that -- that's -- the Buzz infrastructure is outside of
10 our group, so I don't know exactly how -- how it works.
11 But basically it knows how to route because when the
12 MCS -- when the device connect to MCS, we have the
13 TCP/IP address of the device, and we have the Android ID
14 of -- of the device, so that information, it's stored, I
15 think, on Kansas. And then Buzz they can -- they can
16 get that information and send the message.

17 QUESTION: So here on the diagram,
18 instead of third-party server, we have first-party
19 server. Do you see that?

20 ANSWER: Yes.

21 QUESTION: Does that mean it's just
22 another Google server?

23 ANSWER: That's the terminology we use on
24 the Android. First party means Google application.

25 QUESTION: Okay. So first-party server

1 here refers to a Google application server; is that
2 right?

3 ANSWER: Yes.

4 QUESTION: And -- and the difference
5 between this diagram versus the one for external
6 projects is that this first-party server can communicate
7 directly with the GCM backend and bypass the GCM
8 frontend; is that correct?

9 ANSWER: Yes, that's correct.

10 QUESTION: Are there any other
11 differences between the GCM architecture for the
12 external projects and the internal projects?

13 ANSWER: The architecture is the same.
14 It's just an option, the -- the third -- the first-party
15 service, they have this option to talk to the backend
16 directly, but the overall architecture is the same.

17 QUESTION: I'd like to mark another
18 document. It's entitled Android Mobile Connection
19 Service. It will be Exhibit 57. Are you familiar with
20 Exhibit 57?

21 ANSWER: I'm -- I'm not -- I'm not
22 familiar. To be honest, I don't think I saw this
23 particular document before.

24 QUESTION: Okay. I'd like you to turn to
25 the second page of Exhibit 57. There's a heading that

1 says --

2 ANSWER: I'm sorry 57? 51?

3 QUESTION: Oh, I'd like to turn to the
4 second page?

5 ANSWER: I'm sorry, okay, the --

6 QUESTION: Which is --

7 ANSWER: Exhibit 57.

8 QUESTION: Yes.

9 ANSWER: 9551. Okay.

10 QUESTION: Exactly. It says persistent
11 connection and push mechanism. Do you see that?

12 ANSWER: Yes.

13 QUESTION: Underneath that, it says by
14 consolidated all notifications on to the C2DM framework
15 over one MCS connection, the server can minimize the
16 number of open connections, optimized notifications
17 across applications, and make the most efficient use of
18 network and battery.

19 When it says minimizing the number of
20 open connections, what does -- what does that mean?

21 ANSWER: That's what I mentioned before.
22 By providing a framework like C2DM, many applications
23 can use the same connection while if they didn't use
24 that, each application would have to have their own
25 connection.

1 QUESTION: I'd like to mark an additional
2 document. It says Google Cloud Messaging for Android.
3 It's a one-page document with Bates labeled
4 GOOG_SS_2958. It will be Exhibit 60. Oh, sorry. It's
5 actually a three-page document.

6 I'd like to mark another document that
7 says Google Cloud Messaging for Android. It's Bates
8 labeled GOOS -- I mean, GOOG_SS_2133. It will be
9 Exhibit 61.

10 Are you familiar with Exhibits 60 and 61?

11 ANSWER: I'm familiar with Exhibit 60.
12 61 seems to be the same, but it's kind of differently
13 printed, so I'm not sure why, but...

14 QUESTION: What is -- what are
15 Exhibits 60 and 61?

16 ANSWER: That's the Google site page for
17 the GCM project.

18 QUESTION: At the top next to Google
19 Cloud Messaging team, it appears to be updated July 11,
20 2012. Do you see that?

21 ANSWER: Yes.

22 QUESTION: About a third of the way down
23 the page, it says, 3.5 billion messages a day, 200
24 million active users, 40,000 developers. Do you see
25 that?

1 ANSWER: Yes.

2 QUESTION: Do you think that's an
3 accurate statement as of July 2012?

4 ANSWER: I believe it was.

5 QUESTION: So sometime between 2010 and
6 2012, the C2DM and GCM services ramped up to 3.5 billion
7 messages, 200 million users, and 40,000 developers; is
8 that correct?

9 ANSWER: That's what it says here.

10 QUESTION: On Exhibit 60, there's a kind
11 of similar statement about a third of the way down the
12 page. It says 11 billion messages a day, 450 million
13 active users, and 30,000 active applications. Do you
14 see that?

15 ANSWER: Yes.

16 QUESTION: Is it your understanding that
17 there's now more than 11 billion messages a day, 450
18 million active users, and 30,000 active applications for
19 GCM?

20 ANSWER: I don't know how many or what's
21 the current to date.

22 QUESTION: Do you believe that this
23 document would accurately state the number of users and
24 messages and applications?

25 ANSWER: I believe that when -- when this

1 document was written, it was probably accurate.

2 (End of video clip.)

3 MR. DOVEL: Your Honor, our next witness
4 via videotape deposition will be Angana Ghosh.

5 THE COURT: All right. Proceed.

6 (Video clip playing.)

7 QUESTION: What is your name?

8 ANSWER: Angana Ghosh.

9 QUESTION: And where do you work?

10 ANSWER: I work at Google.

11 QUESTION: What is your job at Google?

12 ANSWER: I'm a product manager at Google.

13 QUESTION: What is the purpose of Google
14 Cloud Messaging?

15 ANSWER: The purpose for Google Cloud
16 Messaging was to provide a developer product, an ability
17 for developers to send messages to their devices, or
18 more specifically to their apps, so their apps can get
19 more fresher content.

20 QUESTION: Is that the only purpose of
21 Google Cloud Messaging?

22 ANSWER: That was -- that was the main
23 goal for Google Cloud Messaging. The other goal was
24 that there was C2DM or Cloud to Device Messaging, which
25 was launched in beta. And what we found, that

1 developers loved it, but there were lots of features
2 that were not great, so we wanted to improve the
3 developer experience and make it full stream.

4 QUESTION: Before the break, we were
5 talking about the Google Cloud Messaging team's efforts
6 to reduce radio wake-ups. The reason the Google Cloud
7 Messaging team was trying to reduce radio wake-ups was
8 because radio wake-ups drain battery, correct?

9 ANSWER: That's correct.

10 QUESTION: And the Google Cloud Messaging
11 team wanted to increase the life of -- the battery life
12 of the Android device, correct?

13 ANSWER: That is correct because in the
14 Android team, we consider battery as very important
15 thing for our users.

16 QUESTION: Why do you consider battery to
17 be a very important thing?

18 ANSWER: Because if there's no battery,
19 people cannot use their devices.

20 QUESTION: And Android users care about
21 having long battery on their phones, correct?

22 ANSWER: That is my understanding.

23 QUESTION: Google wants to provide the
24 best battery experience to the users of the Android
25 devices, right?

1 QUESTION: Like I said before, in the
2 Android team, battery is something we deeply care about,
3 so I'm not surprised that this statement appears in this
4 document.

5 QUESTION: And that statement is correct,
6 right?

7 ANSWER: Correct.

8 QUESTION: The new Google Cloud Messaging
9 users, that is, developers who want to use Google Cloud
10 Messaging, need to sign up for Google Cloud Messaging at
11 the Google API console, correct?

12 ANSWER: As far as my recollection goes,
13 that is correct.

14 QUESTION: And as a part of that process,
15 they need to agree to the Google API in terms of service
16 and obtain a simple API key, correct?

17 ANSWER: I do recollect that they have to
18 agree to a TOS, but I do not recollect the name of the
19 actual key that they have to -- they get as a result of
20 the sign-up process.

21 QUESTION: And TOS is terms of service,
22 correct?

23 ANSWER: That's correct.

24 (End of video clip.)

25 MR. DOVEL: Your Honor, our next witness

1 will be Dr. Seenu Srinivasan. He'll be presented via
2 videotape. We anticipate about an hour of direct, and
3 then the Defendants will play his cross-examination, and
4 then we'll have a brief redirect that we'll play via
5 videotape as well.

6 THE COURT: What do you anticipate the
7 total length to be?

8 MR. DOVEL: Approximately an hour-40ish.

9 THE COURT: All right. It's possible
10 that I'll call for a recess in the interim. Just be
11 aware of that.

12 MR. DOVEL: Yes, Your Honor.

13 THE COURT: Let's proceed at this time.
14 (Video clip playing.)

15 QUESTION: Good morning, Dr. Srinivasan.

16 ANSWER: Good morning.

17 QUESTION: To begin, what were the
18 primary questions that you're here to answer for the
19 jury?

20 ANSWER: How much is a market, the
21 smartphone market, willing to pay for notifications sent
22 using the infringing technology compared to the
23 non-infringing technology. And if the infringing
24 technology were offered has an option at this price,
25 what fraction of Google Android smartphone users would

1 purchase that option.

2 QUESTION: Did you find answers to these
3 questions through your work in this case?

4 ANSWER: Yes, I did.

5 QUESTION: What were the answers that you
6 found?

7 ANSWER: I found that the market's
8 willingness to pay was \$12.23, and approximately
9 42 percent of Android smartphone users would purchase
10 this option.

11 QUESTION: Is there a method or technique
12 that can be used to accurately figure out the answers to
13 the questions that you were asked -- to find for the
14 jury?

15 ANSWER: Yes.

16 QUESTION: What is the name of that
17 method or technique?

18 ANSWER: There is a market research
19 technique called conjoint analysis. Conjoint is spelled
20 C-O-N-J-O-I-N-T, conjoint analysis.

21 QUESTION: Are you an expert in conjoint
22 analysis?

23 ANSWER: Yes.

24 QUESTION: I want to -- before we go
25 through your work, describe your expertise for the jury.

1 And let's start back with your education. I understand
2 you're -- you're a Ph.D. Did you go to college?

3 ANSWER: Yes.

4 QUESTION: Where did you go to college?

5 ANSWER: The first college I went to is
6 the Indian Institute of Technology in India.

7 QUESTION: You went to college in India.
8 Did you grow up in India, as well?

9 ANSWER: Yes, indeed.

10 QUESTION: Did you grow up in a small
11 town or a big city?

12 ANSWER: In a small town.

13 QUESTION: After getting that degree, did
14 you work or did you get more schooling?

15 ANSWER: I worked for a couple of years.

16 QUESTION: After doing that work for a
17 couple of years, what did you do next?

18 ANSWER: I came to the United States to
19 study at Carnegie Mellon University.

20 QUESTION: Where is Carnegie Mellon
21 University?

22 ANSWER: It is in Pittsburgh,
23 Pennsylvania.

24 QUESTION: What year -- did you get
25 degrees from Carnegie Mellon?

1 Answer: Yes, I did.

2 QUESTION: What degrees did you get?

3 ANSWER: I got a Master's degree, as well
4 as a Ph.D., that is Doctor of Philosophy.

5 QUESTION: In what subject did you get
6 your Master's and your Ph.D.?

7 ANSWER: They were both in business
8 administration.

9 QUESTION: Now, after getting these
10 degrees from Carnegie Mellon, what did you do next?

11 ANSWER: I went to teach at the U --
12 teach, as well as do research, at the University of
13 Rochester.

14 QUESTION: And how long were you at
15 Rochester teaching?

16 ANSWER: I was there for two -- three
17 years.

18 QUESTION: And what did you do next?

19 ANSWER: I then came in 1974 to Stanford
20 University.

21 QUESTION: How long were you at Stanford
22 University?

23 ANSWER: Stanford University in
24 California, I have been there from 1974 and continuing
25 right now, 2013.

1 QUESTION: All right. So how many years
2 total is that at Stanford?

3 ANSWER: That's 30 -- 39 years and going.

4 QUESTION: And are you a professor at
5 Stanford University?

6 ANSWER: Indeed.

7 QUESTION: What do you do as -- as a
8 professor at Stanford? What are the primary things that
9 you do?

10 ANSWER: Three things: Teaching,
11 research, and some administration.

12 QUESTION: Have you taught any courses
13 that relate to the work that you did in this case?

14 ANSWER: Yes, I did.

15 QUESTION: Can you briefly describe those
16 to the jury for us?

17 ANSWER: There are two courses I taught
18 through the Master's of Business Administration Program.
19 One was called Customer Focus Product Marketing and
20 another course was called Data Analysis.

21 QUESTION: And how do those relate
22 generally to your work in this case?

23 ANSWER: Well, Customer Focus Product
24 Marketing is very much related to this case. The topic
25 is broadly -- if a company were to market a product,

1 what kind of features should they put in that product?

2 How should they price that product? What
3 the segments in the marketplace are. What kind of a
4 product line, as opposed to a single product, they might
5 want to come up with, et cetera.

6 And the data analysis course is very much
7 to do with learning about statistics, which is relevant
8 to this case.

9 QUESTION: In your research, is there any
10 research that you've done that relates to your work in
11 this case?

12 ANSWER: Yes, indeed.

13 QUESTION: Is it a substantial amount of
14 your -- of your research or just a small fraction of it?

15 ANSWER: A major portion of it.

16 QUESTION: Can you describe generally the
17 research you've done that relates to your expertise that
18 you applied in this case?

19 ANSWER: One topic is conjoint analysis.
20 This is the method that I am using in this particular
21 case, and methods for doing conjoint analysis, testing
22 various aspects of it. I also have done some research
23 on what the market is willing to pay for a feature.

24 QUESTION: As a result of doing your
25 research, have you written any research publications

1 that have been published in recognized journals?

2 ANSWER: Indeed.

3 QUESTION: Over the years, approximately
4 how many research publications have you had published in
5 research journals?

6 ANSWER: A total of 80 research
7 publications, of which about 30 are -- 34, maybe -- in
8 -- 30, let's say, in conjoint analysis itself.

9 QUESTION: Are you and Dr. Green
10 generally credited with having originated the -- this
11 concept of conjoint analysis?

12 ANSWER: Yes. Yes, indeed.

13 QUESTION: Now, in addition to doing
14 research and publications, have you worked with
15 companies who are selling products to consumers to apply
16 your research to their products?

17 ANSWER: Yes, I do.

18 QUESTION: Let me ask you about some of
19 those, and I've placed on the screen a slide that I want
20 to ask you about. Do you recognize the -- what's
21 referenced on the screen -- the various products that
22 are referenced here?

23 ANSWER: Yes, I do.

24 QUESTION: Have you done work in
25 connection -- on each of these products?

1 ANSWER: Yes, I have.

2 QUESTION: The next one relates to
3 Sonicare Philips and electric toothbrushes. Can you
4 describe your work in that connection?

5 ANSWER: So this was a project I had done
6 for a company. This was in this case Philips. Sonicare
7 is the name of a brand. And, again, this was done in
8 the context of another market research company working
9 with me. And the question was there were different
10 features that they could add on to the product. And
11 each of these features are -- are customers more
12 interested in. And, again, a question of how much more
13 are they willing to pay for those.

14 QUESTION: Did you use your conjoint
15 analysis techniques in providing these answers?

16 ANSWER: Yes, I did.

17 QUESTION: Now, as a result of your
18 research publications and your work on conjoint analysis
19 and your research in the -- in the marketing research
20 field, have you received any awards?

21 ANSWER: Yes, I have.

22 QUESTION: In particular, are there
23 awards in the market research community that recognize
24 outstanding work in the field?

25 ANSWER: Yes, there are.

1 QUESTION: What are those awards called?

2 ANSWER: There are three awards. One is
3 called the Parlin Award, another one called the
4 Churchill Award, and the third is called the Converse
5 Award. And I've been lucky enough to receive all three
6 of those awards.

7 QUESTION: Now, where do you live?

8 ANSWER: I live in Los Altos, California,
9 which is right next to Palo Alto, California, not too --
10 about 40 miles from San Francisco.

11 QUESTION: And can you tell us just --
12 tell the jury briefly something about your family.

13 ANSWER: Yes, I have my wife of 41 years,
14 married, and we have two grown sons.

15 QUESTION: And what does your wife do?

16 ANSWER: She's a kindergarten teacher.

17 QUESTION: Now, where is this videotaped
18 testimony taking place? Where are we today?

19 ANSWER: This is in a conference room
20 right next to this beautiful courthouse I saw last night
21 in Christmas lights.

22 QUESTION: And what day is it today?

23 ANSWER: Today is December 19th, 2013.

24 QUESTION: Is -- what's the reason why
25 we're taking your testimony today on video rather than

1 having you testify in January at the trial?

2 ANSWER: During January, I need to be
3 teaching at the Indian School of Business in India, so
4 that's it -- I'm teaching during that time.

5 QUESTION: And you won't be able to make
6 it to the trial?

7 ANSWER: Yes.

8 QUESTION: Now, when did you first get
9 involved with this matter concerning smartphones and
10 doing this work for SimpleAir?

11 ANSWER: I want to say approximately June
12 2011.

13 QUESTION: When you were hired by
14 SimpleAir to do this work, were you told to reach any
15 particular results?

16 ANSWER: No.

17 QUESTION: Were you told that the amount
18 that you would be paid would be greater or lesser,
19 depending on the results that you got?

20 ANSWER: Of course not.

21 QUESTION: And how is it that you're
22 being paid? Is it a flat amount? Are you paid by the
23 hour? How are you being paid?

24 ANSWER: I'm being -- being paid by the
25 hour.

1 QUESTION: And how much is it that
2 you're -- you're charging?

3 ANSWER: It is \$900 an hour.

4 QUESTION: Is that your standard rate, or
5 is that a rate that only applies to -- in this case?

6 ANSWER: It's my standard rate for both
7 consulting to companies, as well as for expert witness
8 such as this.

9 QUESTION: Is that the same rate that you
10 would charge Google if they'd hired you to conduct a
11 study on their notification service?

12 ANSWER: Yes. If they had hired me, yes.

13 QUESTION: If Google had hired you, would
14 you have taken the same approach and came up with the
15 same answer?

16 ANSWER: I would have taken the same
17 approach, and I believe if I had done the same survey, I
18 would have gotten the same result.

19 QUESTION: Do you have any bias against
20 Google?

21 ANSWER: Of course not. It's a great
22 company.

23 QUESTION: Let's talk about your specific
24 work in this case. What technique did you use to find
25 the answer?

1 ANSWER: Conjoint analysis.

2 QUESTION: Can you briefly describe to
3 the jury what is conjoint analysis?

4 ANSWER: When customers are choosing
5 products in the marketplace, such as smartphones, there
6 are different features of these products, there are
7 different brand names, different prices. Conjoint
8 analysis determines the values customers place on these
9 different features, the brand name, and price.

10 QUESTION: How does conjoint analysis do
11 that? Can you describe that generally?

12 ANSWER: It's a survey-based technique.
13 It's a market survey-based technique. So you would do a
14 survey with consumers in this market, ask them a series
15 of questions, and through that -- and do some analysis,
16 and as a result of that, you would get those answers.

17 QUESTION: In conjoint analysis -- are
18 you familiar with survey techniques where people are
19 asked just directly how much they are willing to pay for
20 a feature?

21 ANSWER: Yes, I'm familiar with them.

22 QUESTION: Is that conjoint analysis?

23 ANSWER: No.

24 QUESTION: Why -- why does conjoint
25 analysis do something different?

1 ANSWER: If you ask a question directly,
2 research has shown that people tend to overstate what
3 they are willing to pay. Those answers are not
4 accurate.

5 QUESTION: Are you familiar with the
6 reputation of conjoint analysis in the market research
7 community as to whether or not it's good science?

8 ANSWER: Yes.

9 QUESTION: What is conjoint analysis'
10 reputation in the -- in the -- in the market research
11 community?

12 ANSWER: It's a very strong one, so much
13 so that approximately 18,000 commercial applications
14 occur all over the world each year.

15 QUESTION: Has it been tested and
16 researched in -- in numerous research publications?

17 ANSWER: Yes, it has been.

18 QUESTION: Is it used by regular
19 companies who are trying to determine the prices or
20 features of their products?

21 ANSWER: Yes.

22 QUESTION: Now, in this case, what
23 feature or features were you trying to find out
24 information about when you did your survey?

25 ANSWER: There were three features which

1 were central to answering the question of how much the
2 market is willing to pay.

3 QUESTION: And what are those three
4 features?

5 ANSWER: One was notifications, whether
6 you get notifications immediately or you don't get it at
7 all. Another one was battery life. And a third one was
8 price.

9 QUESTION: Why were you interested in
10 finding about -- finding out information about battery
11 life if the subject here is Google's notification
12 system?

13 ANSWER: Because the technical expert in
14 this case, Dr. Knox, had informed me through a
15 mathematical formula that he had worked out that
16 notification service -- services will, in general,
17 reduce battery life, depending on the number of
18 notification apps.

19 QUESTION: So why do you need then to
20 take -- to measure battery life to come up with the
21 market's willingness to pay answer that you came up with
22 in this case?

23 ANSWER: Because the formula --
24 mathematical formula that Dr. Knox gave showed that if
25 you use the infringing technology, there will be some

1 reduction in battery life and that would not be affected
2 by the number of notification apps.

3 On the other hand, if you use an
4 alternative non-infringing technology, then the battery
5 life would be reduced further, depending on how many
6 notification applications there are. The greater the
7 number of notification applications, the greater the
8 drain on battery life.

9 QUESTION: Now, when you conducted your
10 survey, did you just ask the survey takers to provide
11 information about just notifications, battery life, and
12 price, or did you include other things, as well?

13 ANSWER: I included 13 other features.

14 QUESTION: If you're just interested
15 ultimately in those three things, notifications, battery
16 life, and price, why did you include 13 other features?

17 ANSWER: If you ask the question only on
18 those three, you put too much focus on them and people
19 are likely to give inaccurate answers, as previous
20 research has shown. Whereas, if I put those three
21 features in the context of a larger set of features
22 which are important to consumers, then you are more
23 likely to get more accurate answers. And that was the
24 reason.

25 QUESTION: Is that a standard practice in

1 conjoint analysis?

2 ANSWER: Yes.

3 QUESTION: I've placed on the screen a
4 list of features. Do you recognize this?

5 ANSWER: I do.

6 QUESTION: What is this list?

7 ANSWER: This is the list of features I
8 had included in my conjoint analysis survey for this
9 particular case.

10 QUESTION: In doing the survey, is -- is
11 it necessary or unnecessary to include every -- every
12 feature of a smartphone?

13 ANSWER: It is not at all important to
14 include all relevant features. You want to have enough
15 of other important features.

16 QUESTION: Enough for what?

17 ANSWER: So that the focus is not so much
18 on the three features that I'm studying, so it is done
19 in a larger context so consumers don't get to know
20 exactly only those three features, but the question is
21 in terms of in this case, 16 features. But it is not
22 necessary to include all relevant features.

23 QUESTION: How would your results have --
24 would your results have been proved or stayed the same
25 or gotten worse if you'd included many more features,

1 say 30 or a hundred?

2 ANSWER: It's my opinion that if you --
3 an informed opinion, I might say, in the conjoint
4 analysis area -- that if you include too many features,
5 such as 30 features or a hundred features, whatever,
6 then what will happen is that the questionnaire will
7 become too long and complicated, customers will get -- I
8 mean, the responders will get confused, the data will be
9 less accurate, and then finally my result, therefore,
10 will be less accurate.

11 QUESTION: Did you prepare a written
12 report describing your work and your results in this
13 case?

14 ANSWER: Yes, I did.

15 QUESTION: Now, do you understand that
16 Google hired a -- an expert to review your report and
17 comment on it?

18 ANSWER: Yes, I did.

19 QUESTION: Have you reviewed his
20 comments?

21 ANSWER: I have.

22 QUESTION: As a result of reviewing his
23 analysis and criticisms, did that cause you to conclude
24 that there were any problems or issues with your work?

25 ANSWER: I don't believe so. I -- I

1 wrote a report -- supplemental report replying to Dr.
2 Dhar, D-H-A-R, Dr. Dhar -- a supplemental report
3 replying to his criticisms.

4 QUESTION: And what's the name of
5 Google's expert that they hired?

6 ANSWER: Dr. Dhar, D-H-A-R.

7 QUESTION: Is there a standard approach
8 in surveys to test whether you've got a sufficient
9 number of attributes, whether you've got the attributes
10 that are important to consumers?

11 ANSWER: There is one way of doing it,
12 yes.

13 QUESTION: What is that?

14 ANSWER: That's doing a pretest of the
15 study itself with consumers now, not with third-party
16 reviewers.

17 QUESTION: Did you conduct such a pretest
18 before you did your final survey in this case?

19 ANSWER: Yes, I did.

20 (Videoclip ends.)

21 MR. STOCKWELL: Your Honor, while
22 counsel is switching, I want to renew our pre-trial
23 objections to the remainder of this testimony.

24 THE COURT: Duly noted.

25 (Videoclip played.)

1 QUESTION: As a result of doing the
2 pretest, what did that tell you about the adequacy of
3 the feature that you had identified for your -- for your
4 survey?

5 ANSWER: I concluded that I had an
6 adequate representation of the important features that
7 customers consider important in choosing smartphones.

8 QUESTION: Did you do anything to test
9 the wording of the questions for the key features?

10 ANSWER: So I ran the survey earlier and
11 found that the battery life question, the wording of
12 that question, was confusing, and I changed it in the
13 final survey that that is included. That is the basis
14 of my conclusions in this particular case. So that was
15 one thing I did change.

16 I also tested the notifications feature
17 in terms of doing it one way, compared to another way,
18 and found that it did not make a difference and,
19 therefore, I pooled those results -- that is, I combined
20 those results.

21 QUESTION: When was this survey taken
22 that's the basis of your conclusions in this case?

23 ANSWER: February 2012.

24 QUESTION: Now, how many respondents did
25 you actually use or select for your survey? How many

1 people took the survey?

2 ANSWER: There were 623 respondents who
3 completed the survey.

4 QUESTION: Was that a big enough number
5 of respondents to give you statistically accurate
6 answers?

7 ANSWER: Yes. Based on the experience in
8 conjoint analysis, the typical sample size is somewhere
9 around 300 to 400 on average. So this is larger than
10 that.

11 QUESTION: Now, when you did this review,
12 was it limited just to -- just to Android users -- that
13 is, people that use the Google Android operating system
14 on their phones?

15 ANSWER: No, it was not restricted to
16 them.

17 QUESTION: Why not?

18 ANSWER: It goes back to the question
19 that we were asking. What is a market willing to pay?
20 Because if Google Android system were to ask this
21 question of what the market is willing to pay, when they
22 put in this feature, part of the reason for putting in
23 the feature is not only from the point of you're
24 increasing the customer satisfaction of their current
25 customers but also potentially to make other customers

1 attracted to this product so they would buy them. So
2 you want to survey not only your current customers, but
3 you definitely want to include other customers -- that
4 is, potentially who could be your customers in the
5 future -- because you're trying to attract them.

6 QUESTION: Is that an accepted way to
7 approach this problem?

8 ANSWER: It, in fact, is a correct way to
9 do it.

10 QUESTION: I want to have you describe
11 some of the details of the survey questions that were
12 asked in your survey, but first, can you tell the jury
13 broadly what the structure of your survey was?

14 ANSWER: There were three parts to the
15 survey. The first part was about what we call
16 demographics of the person taking the survey. The
17 middle part, which is the main part of the survey --
18 excuse me, is the conjoint analysis part of the survey.
19 And then the final part had to do with asking the
20 respondent some information about their particular
21 smartphone and their pattern of using their particular
22 smartphone in terms of downloaded applications and
23 notifications, so on.

24 QUESTION: Let's talk about that first
25 part, the demographic questions. Can you just generally

1 describe what those questions relate to?

2 ANSWER: So these are questions such as
3 the gender of the respondent, the age of the respondent,
4 their -- whether they are married, marital status, their
5 information about their race and ethnicity, and finally
6 about their annual family income.

7 QUESTION: Did you make use of this
8 information in reaching your final results?

9 ANSWER: One need to check to what extent
10 my sample is representative of coming into my survey is
11 representative of the U.S. adult population in general.

12 So for that purpose, I used it and I made
13 some adjustments because of that.

14 QUESTION Now, let's talk about the
15 conjoint portion of this survey. Can you describe to
16 the jury the -- the sort of questions -- the first --
17 the first part of the conjoint survey, what kind of
18 questions were asked of the survey takers?

19 ANSWER: So when they come into the
20 survey on the conjoint part, they are first -- they
21 first see the list of 16 features we saw before and some
22 descriptions of those features, some information about
23 what different values that feature can take, such as
24 price can be \$50 or a hundred dollars or \$200 or \$300,
25 like that. Then they are asked for each feature which

1 has multiple levels, like the example I just gave you,
2 how desirable or undesirable each of those levels are
3 for each of those features.

4 QUESTION All right. I'm going to ask
5 you -- put on the screen -- withdrawn.

6 I've put on the screen a sample of one of
7 the pages or screen shots from the --

8 ANSWER: Right. I see it.

9 QUESTION: All right. Do you recognize
10 this?

11 ANSWER: I do.

12 QUESTION: Can you just generally
13 describe what is depicted here?

14 ANSWER: These are the different brands
15 operating systems of -- operating systems of
16 smartphones. So you have the brand name, as well as the
17 operating system in that -- for that particular thing.

18 So, for example, Samsung, Android --
19 let's say HTC Android, Apple iPhone, et cetera.

20 QUESTION: In the upper left-hand corner,
21 the word ASEMAP, A-S-E-M-A-P, appears. What does that
22 refer to?

23 ANSWER: That is a particular software
24 and method that is used in conjoint analysis in this
25 particular case.

1 QUESTION: Now, I put on the screen a
2 blow-up from a portion of this page. Can you use this
3 and just describe in one or two sentences how it is that
4 a survey taker would respond to this?

5 ANSWER: So, for instance, in the very
6 first line, they are asked to say that Samsung telephone
7 using the Android operating system, how desirable or not
8 at all desirable it is on a scale, so to speak. You can
9 choose a number anywhere from 0 to 10. 10 would mean
10 that it is extremely desirable, where 0 would mean that
11 it is not at all desirable. And they are asked this
12 question for other brand operating systems, such as the
13 Apple iPhone.

14 QUESTION: Are they asked this sort of
15 question just for the brand name, or does it -- is this
16 also used for the other features in your survey?

17 ANSWER: For every feature it is used.

18 QUESTION: Same sort of analysis?

19 ANSWER: Same sort of questions.

20 QUESTION: Okay. Now, what's the next
21 part of this survey that they would see after doing this
22 ranking of features and then identifying how important
23 they thought they were?

24 ANSWER: Yeah. So you have 16 features
25 here. So we asked them, first rank them in terms of

1 this is the most important feature, all the way down to
2 the one which is the least important feature for that
3 particular respondent. We don't assume these are common
4 across people. So that's the next set of questions.
5 And then we give them peer comparisons, ask them to
6 compare two features at a time.

7 QUESTION: When you say two features, it
8 would be just any -- any 2 of those 16?

9 ANSWER: Right. So this is where the
10 computer intelligence comes -- comes in and the method
11 and the software that I talked about. What this method
12 does is it looks at all the data that the respondent has
13 given so far and the computer kind of asks itself what's
14 the most intelligent question I can ask this person
15 next. And that is the question that is posed next.

16 Then the person gives their response.
17 The computer takes in that response, does some analysis,
18 and then asks itself what's the next question I should
19 ask this person. Like that, 11 two-at-a-time questions
20 were asked.

21 QUESTION: When you say two at a time,
22 let's put up an example of one of those. Explain that
23 to the jury. I've put up an example here.

24 ANSWER: Price and size?

25 QUESTION: Yeah. This is Slide 10. Can

1 you just describe to the jury what is depicted here?

2 ANSWER: Yes. In this particular slide,
3 they are shown two features, two of those 16 features.
4 One is price, another one is screen size. And in front
5 of them there are two bars. And one part of the bar is
6 darker colored; another one is light. Those two bars
7 are both currently equal in length to indicate that they
8 are both equally important, so to speak, at this point.

9 The consumer is asked, which one of these
10 two things are is more important to you? No. 1, how
11 much important to you is the second question? So the
12 person will click on the one they think is more
13 important to them. Let's say price is more important to
14 me than screen size in this case. Then I will click on
15 price, and I will drag it to the right. That is, I have
16 clicked on it and -- and with a computer mouse you will
17 click -- click it to the right, like what you have shown
18 just now. And in this case, for example, this person is
19 saying that price is much more important to him or her
20 compared to screen size.

21 QUESTION: Can the survey respondent
22 select any portion along there with their -- their
23 mouse?

24 ANSWER: Indeed.

25 QUESTION: Well, my question is: Are

1 they all comparisons of price, or are they comparison --
2 or do you have anywhere they're asked to compare two
3 features?

4 ANSWER: They can be -- yes, they can be
5 asked to compare two features where price is not one of
6 them. Next slide.

7 QUESTION: Let's show an example of that.
8 Can you explain what's on the screen now?

9 ANSWER: So in this particular case, we
10 have touch screen -- that is, whether or not the
11 smartphone has a touch screen. And No. 2, the
12 notification feature. And this particular respondent,
13 in answer to this particular question, is saying, well,
14 the touch screen is somewhat more important than
15 notifications.

16 QUESTION: What if a respondent, in
17 taking the survey, concluded that for them notifications
18 was of no importance, as compared to the feature that
19 they were comparing to? If they, for example, thought
20 that touch screen compared to the notifications was of
21 no experience, how would that be indicated by the survey
22 taker?

23 ANSWER: In that case, they could move
24 the touch screen all the way to the end or conversely
25 they can put the notification -- put it all the way to

1 the end. So like the picture that you are now showing
2 where you notice the touch screen is full hundred
3 percent and the notification is just not showing at all.

4 So in this case, they're telling us that
5 touch screen is just so much more important and
6 notifications is not at all important, relative to each
7 other.

8 QUESTION: Now, did you collect data like
9 this from -- from each of those survey respondents about
10 how they would trade off various features, including
11 price and other features?

12 ANSWER: Yes, I did.

13 QUESTION: After the -- the paired
14 comparisons were shown to the survey takers, what would
15 be the next task that they would do then?

16 ANSWER: They were shown five
17 smartphones, so to speak, describe only the five most
18 important features to that particular respondent. So
19 they will see first a smartphone. For that particular
20 consumer, which are the five most important features for
21 them -- to show them.

22 QUESTION: I ask you to slow down a
23 little bit.

24 ANSWER: Yeah. So it will show it to
25 them. And it will ask him or her, how likely is it you

1 would purchase this smartphone, assuming that all the
2 other features are attractive?

3 QUESTION: After the survey takers
4 provided responses to how likely they would be to buy
5 phones, what's the next portion of the survey that they
6 received?

7 ANSWER: Yeah. Just to be sure, on this
8 likelihood of purchase, that question was asked of five
9 different products, some very attractive and some not so
10 attractive in terms of the features. So once I'm done
11 with that, the question you're asking, is I ask them
12 some questions about their particular smartphone.

13 QUESTION: Now, Dr. Dhar presented some
14 criticisms in his report that I wanted to ask you about
15 regarding the survey. One criticism he says is that the
16 instructions describe the 16 features as ones that are
17 important in choosing a smartphone, and he criticized
18 that as saying that that would artificially inflate the
19 importance of notifications and make the results
20 invalid. Do you agree with that criticism?

21 ANSWER: I don't.

22 QUESTION: How does the comparison of one
23 feature against another relate to whether or not there's
24 going to be any inflation of value for one feature?

25 ANSWER: Let me put it this way. If you

1 ask a question of one-by-one each of the features how
2 important they are, then I can see the possibility that
3 it could have an inflated. That's not what I'm doing.
4 I'm asking them to compare two features like you saw in
5 those bars before, asking them how much more important
6 is one compared to the other. So I don't believe there
7 will be an inflation of importance because of that.

8 QUESTION: Now, the -- another criticism
9 of Dr. Dhar's is that he says that this approach does
10 not accurately model the decision making process of
11 consumers. Do you agree with that criticism?

12 ANSWER: So Dr. Dhar is talking about the
13 process by which consumers actually choose smartphones.
14 Conjoint analysis is not a process model. It is a
15 prediction model. In other words, conjoint analysis
16 really says that it is not trying to exactly model the
17 process by which actual consumers are using, but it is
18 able to abstract it -- the essential elements of it --
19 in such a way that it is able to predict what they are
20 actually going to do. So it is more of a prediction
21 model. So the fact it is not exactly the name of the
22 process, it doesn't matter because prediction has been
23 shown to be very high.

24 QUESTION: Dr. Dhar says that there are
25 obvious respondent errors -- that is, errors in the --

1 for particular survey takers where they have --
2 they've -- they've got -- they've given responses that
3 just don't make sense, but they've said that they prefer
4 a higher price to a lower price or lower battery life to
5 higher battery life. What -- have you read his
6 criticism in that regard?

7 ANSWER: Yes, I have seen that criticism.

8 QUESTION: What is your response to that
9 criticism?

10 ANSWER: Well, in practical conjoint
11 analysis surveys in the real world, some people make
12 mistakes. This is true. And they did in my survey,
13 also. This is common.

14 QUESTION: When -- as a result of that --
15 of those errors, does that -- what does that mean with
16 regard to the validity of your survey?

17 ANSWER: So one of the analysis I did in
18 response to Dr. Dhar's report is I took out those
19 respondents who made an obvious error -- a big error in
20 terms of price, for example, like what you said. They
21 said that actually \$300 is preferable to \$50, for
22 example, or they said that the current -- the full
23 battery life is not as good as 20 percent battery life,
24 et cetera. I took out people who were -- were obviously
25 reversed, so to speak, their preferences, and recomputed

1 my market's willingness to pay calculation. And I found
2 that my number was not particularly affected. If
3 anything, it went up somewhat.

4 QUESTION: Let me see if I understand
5 that. Are you saying that in this compensation that you
6 then took out the survey respondents who had made those
7 sort of errors and -- and then just did your analysis
8 using the others?

9 ANSWER: Using only the remaining people,
10 yeah, that's what I was trying to say.

11 QUESTION: And what was the result when
12 you did that?

13 ANSWER: I don't have the exact number in
14 front of me. I can look it up if you are interested.
15 But for \$12.43, which is my number -- market willingness
16 to pay number, it goes up to maybe \$12.70 or something
17 like that. It -- it goes up. It doesn't -- so it
18 doesn't change a lot, but, if anything, it goes up.

19 QUESTION: Did you have a way of testing
20 as a whole how reliable the answers are that the
21 respondents gave?

22 ANSWER: Yes, yes, I have a way, and I --
23 and I did test it.

24 QUESTION: Can you describe that to the
25 jury?

1 ANSWER: So I computed a correlation, as
2 it is called, in statistics. And if the correlation is
3 more than two-thirds, then I called those people as
4 higher quality data respondents. And the people who are
5 below two-thirds, I called them not as high -- lower
6 quality respondents -- data respondents. And I did the
7 analysis both ways, as I said. I did the market
8 willingness to pay using only the higher quality
9 respondents. I did then another analysis including
10 everybody, and I found that if I did everybody, the
11 market's willingness to pay goes up a little bit. So,
12 again, my results were conservative in that sense.

13 QUESTION: I've got a couple of slides
14 here, Dr. Srinivasan, and I want to walk through those
15 and have you explain this concept of market's
16 willingness to pay. So starting with this slide which
17 shows a -- a phone without a camera feature. Can you
18 explain the concept of market's willingness to pay?

19 ANSWER: So in this particular slide, you
20 are seeing a phone -- smartphone without a camera, so it
21 says no camera. And the price of this phone is \$200.

22 Now, you have added to that previous
23 slide another picture in which the phone has a camera.
24 So you've added a feature which people generally prefer.

25 Now, the question is, how much can I

1 increase my price and still keep the same number of
2 units I sold before, because I'm giving something more
3 attractive? How much more can I -- how much incremental
4 I can increase my price and still keep the same number
5 of units? That increase in price is what we mean by the
6 market's willingness to pay for the feature -- in this
7 case, camera.

8 QUESTION: All right. Let's do it
9 another way. Let's assume we start with a phone that
10 already has the feature and then the phone -- then the
11 feature's taken away. Can you describe market's
12 willingness to pay in that circumstance?

13 ANSWER: Right. So before you had the
14 camera, now this -- this particular phone does not have
15 the camera. So the people are likely to find the
16 smartphone without the camera less attractive. So how
17 much do you have to decrease the price now? As you're
18 showing that redline there, orange line, showing how
19 much does the price have to go down and still keep the
20 same unit sales. So that is also the market's
21 willingness to pay.

22 QUESTION: Is that -- is the market's
23 willingness to pay for the decrease and for the
24 increase, is it the same or is it different in the
25 method that you used?

1 ANSWER: It is the same if the change
2 that you are making is small, and -- which is -- which
3 is true in my particular case.

4 (Videoclip ends.)

5 THE COURT: Why don't we use this pause
6 to take a recess and then we'll continue with this
7 deposition testimony when we return.

8 Ladies and gentlemen of the jury, I'm
9 going to excuse you to the jury room for a brief break.
10 Don't discuss the case among yourselves. You may leave
11 your juror notebooks in your chairs, if you'd like, and
12 we'll continue shortly. You are excused to the jury
13 room at this time.

14 COURT SECURITY OFFICER: All rise.

15 (Jury out.)

16 THE COURT: The Court stands in recess.

17 (Recess.)

18 (Jury out.)

19 COURT SECURITY OFFICER: All rise.

20 THE COURT: Be seated, please.

21 Are we ready to proceed with the
22 deposition clips?

23 MR. DOVEL: Yes, Your Honor.

24 THE COURT: All right. Let's bring in
25 the jury, please.

1 COURT SECURITY OFFICER: Yes, sir.

2 THE COURT: Mr. Dovel, is there another
3 deposition clip after this one, or is this the last one?

4 MR. DOVEL: This is the last one. We
5 have another 30 seconds we will play after Mr. Mills.

6 So next witness will be Mr. Mills.

7 THE COURT: All right.

8 COURT SECURITY OFFICER: All rise for the
9 jury.

10 (Jury in.)

11 THE COURT: Be seated, ladies and
12 gentlemen.

13 Plaintiff may continue with your witness
14 by deposition.

15 (Videoclip played.)

16 QUESTION: Now, in general, if someone
17 gathers survey data showing how much individual
18 consumers value a feature, would that -- and that's all
19 the data they had, would that be enough data to
20 accurately estimate the market's willingness to pay for
21 that feature?

22 ANSWER: Okay. So the market willingness
23 to pay is a general concept. That is, with the
24 feature -- with the desirable feature put on, how much
25 is the price to be increased so that the unit sales

1 remains the same, as I pointed out before. If the -- if
2 the change that you are making is very substantial --
3 that is, the value -- the total value is being increased
4 by a substantial amount, then this particular method I
5 used is not appropriate. There are -- it's not
6 appropriate. You have to do something else.

7 QUESTION: What other information would
8 you need in that circumstance in the general case where
9 you've got these large changes?

10 ANSWER: You have to do what is called
11 the computer simulation. It's called a market
12 simulation, it is called. So you need to have lot -- a
13 lot more additional data. I'll give you some examples
14 of that. You need to know what are the different brands
15 competing in the marketplace? For each of those brands,
16 what are the models? For each of those models, what are
17 the features? What are the prices? How familiar --
18 what is the market's familiarity with each of these
19 brands? What is the level of advertising that goes on,
20 both now and in the past? How much distribution is out
21 there? That is, in other words, how available each of
22 these are with the different service providers? So you
23 need a lot of additional information, and then you have
24 to build what is called a simulation model. Using that,
25 you can answer the question for any other feature also,

1 but if -- if the value change is substantial.

2 QUESTION: All right. If you didn't have
3 all that information in this case, how is it that you
4 were able to reliably determine the market's willingness
5 to pay?

6 ANSWER: I was able to -- I didn't have,
7 first of all, all those information, but I did not need
8 it in this case because the change I was talking about
9 is small, and, therefore, I was able to use something
10 called a formula 14 -- I will get to that in a minute if
11 you -- if you -- as -- as a way of determining it
12 without needing all that other information.

13 QUESTION: When you refer to formula 14,
14 what are you referring to?

15 ANSWER: There is a research paper by
16 Professor Ofek of the Harvard Business School and
17 myself, I think, titled something like, How Much is the
18 Market Willing to Pay For an Improvement in an
19 Attribute, I think it is, something like that. And in
20 that research publication, there is a formula 14.
21 There's a 14 formula.

22 QUESTION: All right. Let me put on the
23 screen -- you mentioned the -- the name of the
24 publication. When was that published?

25 ANSWER: I believe it is a 2002, I want

1 to say.

2 QUESTION: Now, on the screen now, we
3 also have a long -- looks like a scientific or
4 mathematical formula. It has the number 14. Do you
5 recognize that?

6 ANSWER: Yes, that was the formula I was
7 referring to as formula 14.

8 QUESTION: Now, this looks complicated to
9 me. Did you have enough information data that you could
10 use this formula to calculate the market's willingness
11 to pay?

12 ANSWER: I had enough information to use
13 formula 14, yes.

14 QUESTION: Has this formula been
15 generally recognized in the market research community as
16 applicable, as one that's valid?

17 ANSWER: Yes.

18 QUESTION: Can -- can you provide to the
19 jury any evidence to show that this approach is accepted
20 in the mark -- market research community as providing
21 valid results?

22 ANSWER: So there are two things I could
23 say on those lines. One, in the year 2002, when this
24 paper was published, each year people in the market
25 research -- quantitative marketing research community

1 look at all the papers that are published that year in
2 either this journal or another leading journal and say
3 which paper had -- had the greatest value to the
4 marketing research community. And this paper won
5 something called the John Little Award for -- for
6 getting that -- for being recognized in that way. So
7 that's one.

8 Secondly, this paper has been out for
9 about 11 years now, 2002. We are now in 2013.
10 Generally, what happens in the scientific community is
11 that people read it, they check it, and if they have an
12 objection to it and they can say that there is something
13 not quite right about it, they write a publication on
14 that basis. I know of no such research which has been
15 published in this past 11 years potentially refuting
16 this -- this approach.

17 QUESTION: Is either the precise formula
18 14 or a variation of it in common use in the market
19 research community?

20 ANSWER: A variation of it is in use
21 in -- in the market research community.

22 QUESTION: Just starting with each of
23 these columns, can you explain to the jury what's
24 depicted here and your results for the market's
25 willingness to pay for infringing notifications for

1 Android phones?

2 ANSWER: So the first column say O/S
3 weights, question mark. So it's asking did we use the
4 weights that were in the formula 14. So it says -- it
5 say, no, which means the variation of that formula
6 was -- this is the one which you asked me a minute ago,
7 asking is there a variation of that formula that is used
8 in the market research community. The answer is yes.
9 So that's what the no is about.

10 QUESTION: Let me ask you a question
11 about that. When you say the weights, those are all the
12 details that are in that formula 14?

13 ANSWER: That's correct.

14 QUESTION: And when it says -- in the
15 column when it says, no, that means they're using the
16 simplified version?

17 ANSWER: That's right.

18 QUESTION: Let's go to the second column.
19 What does that indicate?

20 ANSWER: This says smartphone price
21 range, it says. Suppose you take the entire price range
22 going from \$50 to \$300. That's what it says.

23 QUESTION: Now, the next column says
24 MWTP. What does that indicate?

25 ANSWER: The MWTP stands for market's

1 willingness to pay, in this case, for the infringing
2 notification compared to non-infringing notification,
3 and it says the answer is \$12.23.

4 QUESTION: Now, can you explain the next
5 two columns which are -- which are labeled lower and
6 upper?

7 ANSWER: So it's asking the following
8 question -- answering the following question: There
9 were 409 respondents on the basis of whom I have come up
10 with this answer of 12 -- \$12.23. If I had taken a
11 different sample of 409 respondents, I would get a
12 slightly different answer. If I took a third sample of
13 409 respondents, I would get yet another answer. So the
14 question is what's the margin of error? Because my
15 answer is based on this particular sample of 409
16 respondents. What's the margin of error on my answer?
17 \$12.23. So it says my number can be as low as \$8.33 on
18 the lower end, and on the upper end it can be as high as
19 \$16.14. And I'm 95 percent confident -- loosely
20 speaking, 95 percent confident that the number is
21 between this \$8.33 and \$16.14, but if you press me to
22 answer one -- one number only, then I will say it is
23 \$12.23.

24 QUESTION: Did Dr. Dhar in his report
25 criticize your calculation of this margin of error?

1 ANSWER: He did not.

2 QUESTION: Let's now talk about the other
3 rows that are in this table. Can you explain what those
4 represent?

5 ANSWER: So the final three rows in this
6 table -- you notice the first column says, yes, which
7 means that I used the exact formula 14.

8 Now, so all that complicated things. And
9 not only that, I tested different price ranges, because
10 \$50 to \$300 is a big price gap. So I tested between 50
11 and hundred in the second row there, hundred and \$200,
12 and finally, between \$200 and \$300. If I tested that
13 way using the exact formula 14, the numbers change a
14 little bit. There's a \$12.23, which I reported before.
15 It's either 12.86 or \$13.32 or \$12.77. So the numbers
16 change a little bit, up -- up to, let's say, a dollar or
17 so.

18 QUESTION: All right. Now, as a result
19 of your work, what did you come up with as your final
20 opinion that you would recommend as the market
21 willingness to pay in this case?

22 ANSWER: I would say that the smartphone
23 market is willing to pay \$12.23 for receiving
24 notifications using the Google Android infringing
25 technology compared to the non-infringing technology.

1 QUESTION: Now, Dr. Dhar, he criticized
2 your results by saying, well, if I take this -- this
3 market willingness to pay formula and if I try to apply
4 it to other features that you surveyed, we come up with
5 what he says are large amounts. Like he points to at
6 the bottom of this Table 1 I've got on the screen that,
7 as he calculated it, the difference in price for an 8
8 megapixel versus a 2 megapixel camera would be \$195.
9 And he says that number is so big so it doesn't make
10 sense. Now, what is your response to Dr. Dhar's
11 criticism?

12 ANSWER: Dr. Dhar is doing market's
13 willingness to pay calculations for some changes using
14 my formula 14 when, in fact, he should not be using
15 formula 14 in those cases.

16 QUESTION: Why not?

17 ANSWER: Because I mentioned before that
18 formula 14 applies only to very small -- small changes,
19 and he has applied to large changes. As a matter of
20 fact, if I compare -- if I look at all of the numbers,
21 not just 8 megapixel versus 2 megapixel, but all of them
22 in this table, Table 1, the errors are about more than
23 65 times compared to what I had done. So this is just
24 so much outside the range of calculations, that he
25 should not be using this formula. If he really wanted

1 to answer these questions, he should really do the more
2 elaborate simulation I talked about before.

3 QUESTION: In your opinion, is it
4 appropriate to use formula 14 to measure market's
5 willingness to pay for the changes that he's trying to
6 do -- trying to do in this table?

7 ANSWER: No. He should not have.

8 QUESTION: I'm going to ask you about the
9 -- the other part of your analysis, and can you explain
10 to the jury what's on this screen now?

11 ANSWER: So I also asked the following
12 question: The market's willingness to pay was \$12.23.
13 So suppose Google Android phones charge \$12.23 as an
14 option. You can have this better technology as an
15 option. Are you willing to buy it? I looked at only
16 the Android users in this case, and I found that 42
17 percent of them approximately would purchase that
18 option.

19 QUESTION: Would purchase the option at
20 what price?

21 ANSWER: At the \$12.23 price.

22 QUESTION: \$12.23?

23 ANSWER: Cents, correct. And there is a
24 range. Of course, again, confidence -- 93 percent, I am
25 confident, that the number is somewhere between 35 and

1 49 percent.

2 QUESTION: Did you in your report reach a
3 conclusion as to the average number of applications with
4 automatic notifications that would be found on
5 smartphones?

6 ANSWER: Yes, I did.

7 QUESTION: What did you find for -- the
8 all smartphone users in -- in total?

9 ANSWER: So I found that if I use all
10 smart -- all smartphone users, that on average, they
11 have like 4.9, approximately 5, number of applications
12 with automatic -- with notification applications.

13 QUESTION: Now, the next column refers to
14 Android operating system. What did you find for users
15 of the Android operating system?

16 ANSWER: If I use only the Android --
17 only the respondents whose smartphones use the Android
18 operating system -- that is a Google Android operating
19 system -- then the average number of notification app --
20 apps is 4.3.

21 QUESTION: What about for users of
22 Microsoft Windows operating system? What did you
23 discover about their use of notification applications?

24 ANSWER: In that case, the average number
25 of notifications was 2.1.

1 QUESTION: Was that less or greater than
2 the number for Google Android users?

3 ANSWER: Android users have almost double
4 the number of automatic notifications compared to
5 Microsoft Windows smartphone users.

6 QUESTION: Let's go to the final slide,
7 which is a table that compares results for Google
8 Android and Microsoft Windows. Can you describe that --
9 your results there to the jury?

10 ANSWER: I calculated this market
11 willingness to pay, which I have talked about before,
12 for both those -- for people using the Android operating
13 system phones and separately for those -- excuse me, I
14 should back up.

15 So I calculated my market willingness to
16 pay. Dr. Knox, the technical expert, had given me what
17 is the battery loss -- battery life loss if you used a
18 representative Android phone, and he had given me a
19 different table -- a different mathematical formula if
20 you use a representative Microsoft Windows operating
21 system phone. If you use the battery loss for the
22 Android -- typical of the representative Android
23 smartphone, the answer is \$12.23, which is the number
24 that I gave you before. Had I done the same analysis
25 using Dr. Knox's information for the Microsoft Windows

1 representative phone, the number would have been only
2 \$11.42, a little bit less, about 80 cents less.

3 And the second question, which is if this
4 infringing technology were offered at the market's
5 willingness to pay price, what percentage of those
6 respective users would purchase that option? So 42
7 percent of Android smartphone users -- Google Android
8 smartphone users would purchase the option, whereas only
9 20 -- I'm rounding it a little bit here, about 29
10 percent of the Microsoft Windows smartphone users would
11 purchase the option.

12 (Videoclip ends.)

13 MR. DOVEL: Your Honor, for the record,
14 the exhibit that Dr. Srinivasan was using was
15 Plaintiff's Exhibit 85. And with that, we'll pass the
16 witness.

17 THE COURT: All right. Do we have
18 counter designation clip to play on behalf of the
19 Defendant?

20 MR. STOCKWELL: That's right, Your Honor.

21 THE COURT: Proceed with your portion of
22 the deposition.

23 (Videoclip played.)

24 QUESTION: Dr. Srinivasan, we can agree
25 that market willingness to pay is not the same thing as

1 the optimal price that a company can charge for a
2 product feature; that's true?

3 ANSWER: That's correct.

4 QUESTION: Market willingness to pay is a
5 formula, your formula 14 that you talked about, which is
6 based on the theoretical assumption that competitors do
7 not react to the attribute and price changes made by the
8 firm offering the attribute; isn't that right?

9 ANSWER: One more time, your question.

10 QUESTION: Sure. Market willingness to
11 pay, that formula 14 we talked about, is based on a
12 theoretical assumption that competitors do not react to
13 the attribute and price changes made by the firm
14 offering the attribute, right?

15 ANSWER: That's correct.

16 QUESTION: But in many cases, it's more
17 realistic to assume that competitors will, in fact,
18 react by adjusting their own prices, true?

19 ANSWER: In some cases, they may. In
20 some cases, may not.

21 QUESTION: Well, in fact, you said in
22 your paper it's more realistic to assume the customers
23 will react by adjusting their prices. Isn't that what
24 you wrote in your paper?

25 ANSWER: That paper in general -- in a

1 general case, that's what it says, yes.

2 QUESTION: Let me show you what's been
3 marked as DX 367, 001. Do you recognize a copy of that?

4 ANSWER: Indeed.

5 QUESTION: If you'll turn to Page 407, I
6 think it is.

7 ANSWER: Yes.

8 QUESTION: And it says in the first full
9 sentence in the second column, in many cases, it is more
10 realistic to assume that competitors will, in fact,
11 react by adjusting their own prices. Did I read that
12 correctly?

13 ANSWER: You're on -- you're on the
14 second column?

15 QUESTION: Yes.

16 ANSWER: In many cases. I see it now.
17 One second.

18 QUESTION: So did I read that correctly?

19 ANSWER: Yes. In many cases, yes.

20 QUESTION: And, in fact, you've modelled
21 the price reaction of competitors in your paper, didn't
22 you?

23 ANSWER: I did.

24 QUESTION: And you see -- see those
25 results in Table 3 on the first column of Page 407,

1 correct?

2 ANSWER: That's correct.

3 QUESTION: In your study, you did not
4 consider the reactions of competitors to Google if
5 Google were to attempt to impose a fee that would result
6 in consumers paying an additional \$12.23 per smartphone,
7 did you?

8 ANSWER: I did not for a reason.

9 QUESTION: In considering a proper
10 conjoint study, can we agree that one of the primary
11 considerations is to include those features that
12 customers consider important in choosing alternative
13 smartphones?

14 ANSWER: I used the word relevant, but
15 important, similar, yeah, uh-huh.

16 QUESTION: Because you want to determine
17 the important drivers of customer choice in the product
18 category, right?

19 ANSWER: Not in this case. In general,
20 in conjoint analysis, yes. Not in this particular case.

21 QUESTION: And we can agree that if you
22 leave out important features, that makes your study less
23 reliable; isn't that true?

24 ANSWER: I don't -- I don't agree with
25 that.

1 QUESTION: So, Dr. Srinivasan, if you'll
2 take a look at Page 131 of your deposition. I asked you
3 at that time, if you leave out features --

4 MR. DOVEL: Your Honor, objection.

5 QUESTION: -- to 124, that consumers --
6 (Videoclip stopped.)

7 MR. DOVEL: Can we stop the video?

8 THE COURT: Let's stop the video.

9 MR. DOVEL: May we approach?

10 THE COURT: Counsel, approach the bench.
11 (Bench conference.)

12 MR. DOVEL: I thought the Court granted
13 our objection to this one.

14 MR. STOCKWELL: You did. And we took
15 that out. What counsel failed to recognize right
16 underneath that we'd actually read the whole question
17 and response and I believe that's what this is.

18 MR. DOVEL: No, no. It's just the two --
19 the two sentences are the same thing.

20 MR. STOCKWELL: Can I -- can I go grab my
21 paper?

22 THE COURT: Let me get mine. Go get
23 yours.

24 Let's -- let's speak to the microphone,
25 and tell me what the problem is.

1 MR. STOCKWELL: So I had you as having
2 stricken, Your Honor, were Clips 6 which was page 77, 7
3 which was page 78, 8 which was page 78, and then there
4 was a -- we also struck this little part right here just
5 because that was leading in with a deposition question.

6 Those were -- those were your rulings.

7 THE COURT: What's your objection, Mr.
8 Dovel?

9 MR. STOCKWELL: This is a different clip.

10 MR. DOVEL: We can take a look at this
11 clip.

12 MR. STOCKWELL: Make sure.

13 THE COURT: Well, I asked everybody at
14 the bench if they understood it just so we wouldn't be
15 in this situation.

16 MR. DOVEL: Okay. This is playing Clip 9
17 now?

18 MR. STOCKWELL: Yeah, this should be on
19 Clip 9. That's what Jason said.

20 MR. DOVEL: I don't think it is. Let's
21 go double-check. I think that might be a mistake. If
22 it's Clip 9, he's right.

23 THE COURT: All right. Why don't you
24 check with your technical person and come back up here
25 and tell me.

1 MR. DOVEL: Yeah.

2 (Bench conference concluded.)

3 THE COURT: I apologize for the
4 interruption, ladies and gentlemen, just bear with us.

5 (Bench conference.)

6 MR. DOVEL: My apologies, he's right.

7 THE COURT: Well, apology is accepted,
8 but I specifically asked both sides to make sure -- I
9 think it's detrimental to the Defendant to have this
10 interruption, and I'm going to detract 15 minutes from
11 the Plaintiff's trial time.

12 MR. DOVEL: I understand, Your Honor.

13 THE COURT: All right. Let's proceed.

14 (Bench conference concluded.)

15 THE COURT: All right. Let's proceed
16 with the deposition clip.

17 (Videoclip played.)

18 QUESTION: Does that make the survey
19 unreliable?

20 You answered: It may not if the
21 attributes that are important, which you have left out,
22 are picked up in some other way by the attributes you've
23 imported.

24 And then I asked: And if they are not
25 picked up, then it would be unreliable?

1 And you answered: Yes. If you left out
2 important attributes which are somehow not picked up by
3 the attributes that you've included in the study, then
4 it is increasingly unreliable. Wasn't that your
5 testimony at the time?

6 ANSWER: Just the next line I say
7 something more. You are reading it out of context.

8 QUESTION: Sir, you can -- your counsel
9 can ask questions later.

10 ANSWER: Okay. Sorry.

11 QUESTION: But isn't that what you
12 testified?

13 ANSWER: Yes, up to that point. If you
14 just stop at that line, what you said is right, but just
15 in the next answer, I say something more.

16 QUESTION: I'm going to read the rest of
17 this section.

18 ANSWER: Okay. Please.

19 QUESTION: And what happens if you leave
20 out features that are important that are not picked up
21 by other features? Will that inflate the value of the
22 feature of interest?

23 You answered: Not with respect to the
24 market's willingness to pay because it's a ratio of two
25 things. So if they're both inflated, it will not affect

1 the results.

2 QUESTION: So it just makes the outcome
3 unreliable, but it doesn't inflate the feature and
4 interest relative to the other features?

5 And I asked you again: So it does not
6 inflate the feature of interest you are saying relative
7 to the features that are in the study? It just makes
8 the study increasingly more unreliable than if you would
9 have included the important features. Is that a fair
10 statement?

11 And you answered: It makes it less
12 reliable if you left out important attributes.

13 ANSWER: Sir, you left out one sentence
14 in between when you were reading. The witness, it says
15 it doesn't one more time, last part of what you said.
16 That is -- you know, I'm just repeating. It does not
17 affect with respect to the rate with respect to market
18 and willingness to pay. You just left out that one
19 sentence.

20 QUESTION: But you concluded with when
21 you include that sentence, the last thing you said is it
22 makes it less reliable if you left out important
23 attributes.

24 ANSWER: I said that, but you have to
25 read the whole paragraph.

1 QUESTION: It's -- are you familiar -- I
2 think we were talking about the term aesthetics; is that
3 right?

4 ANSWER: Yes.

5 QUESTION: How would you define that
6 term?

7 ANSWER: Actually, a professor at my
8 school told me a good way of thinking about aesthetics
9 is to think of the opposite, which is anesthetic.
10 Anesthetic means you don't feel anything. So aesthetics
11 is a matter of feeling about something. So it has to do
12 with visual appeal. It has to do with touch and feel.
13 All of those things are aesthetic, particularly the user
14 usability of something, appearance of something. All of
15 those are considered aesthetics.

16 QUESTION: And it's true, isn't it, that
17 aesthetics is an important consideration when consumers
18 purchase a smartphone?

19 ANSWER: It -- it could certainly be for
20 some people, yes.

21 QUESTION: And most experts would agree
22 that conjoint studies do not do well at measuring
23 aesthetics; isn't that true?

24 ANSWER: It does not if it -- if it
25 includes a brand, for example, as an attribute, then

1 this is not a problem. If -- if it just -- if there's
2 no brand and you leave out aesthetic, then it is a
3 problem.

4 QUESTION: So you in your study did not
5 attempt to define the term aesthetics in terms of visual
6 appeal, touch or feel, and measure that value in your
7 study, did you?

8 ANSWER: I did not.

9 QUESTION: And you say that you can in --
10 that you can -- you said that you are able to measure
11 that through the concept of brand; is that your
12 testimony?

13 ANSWER: Not through the concept of
14 brand, but because I have included brand as one of my
15 features -- people, for instance, know that Apple is --
16 many people think that Apple's products are
17 aesthetically more appealing compared to some other
18 products. Other people may feel differently. So brand
19 was included as a feature in my study.

20 QUESTION: But you linked the definition
21 of brand with operating system, didn't you?

22 ANSWER: I do.

23 QUESTION: And operating system has
24 nothing to do with aesthetics, does it?

25 ANSWER: It does not.

1 QUESTION: So the very best you were able
2 to do was only indirectly capture aesthetics through
3 your term operating system brand; is that right?

4 ANSWER: I was able to capture it only
5 indirectly, yes.

6 QUESTION: And in deciding what features
7 were important to consumers, you based that on the -- I
8 think you said this morning the 2011 Consumer Report
9 Guide.

10 ANSWER: 2011 Annual Buying Guide, I
11 think it was called. Consumer Reports Annual Buying
12 Guide 2011, yes.

13 QUESTION: Okay. Thank you. Annual
14 Buying Guide.

15 ANSWER: Yeah.

16 QUESTION: And that Annual Buying Guide
17 mentions a number of usability features that you did not
18 directly measure; isn't that true?

19 ANSWER: There are some features they
20 mention -- usability features, as you call, which I did
21 not include, yes.

22 QUESTION: And that would include
23 navigation?

24 ANSWER: That's a usability feature, yes.

25 QUESTION: Voice quality?

1 ANSWER: Yes.

2 QUESTION: Phoning? Phoning?

3 ANSWER: Phoning?

4 QUESTION: Phoning.

5 ANSWER: What does that mean?

6 QUESTION: Let me show you an exhibit.

7 ANSWER: So they are saying how good is
8 it as a phone? Is that what you mean? Or in the test
9 results? Is that what you mean?

10 QUESTION: This would be -- by the way,
11 for the record, DX 362 is our exhibit number. And we're
12 looking at --

13 ANSWER: Yes, I see the column called
14 phoning. So they are looking at how this works as a
15 telephone, yes, uh-huh.

16 QUESTION: You didn't cover that one
17 either, did you?

18 ANSWER: Because all these smartphones
19 include -- telephone is a central part of all
20 smartphones, so it is included in that sense.

21 QUESTION: But not all have the same
22 phoning quality, do they?

23 ANSWER: They do not. And so brand,
24 again, captures it indirectly.

25 QUESTION: So messaging is another

1 usability feature you did not directly measure; isn't
2 that right?

3 ANSWER: Yes, again, indirectly captured
4 by brand, but not directly.

5 QUESTION: And you didn't directly
6 capture web browsing either, did you?

7 ANSWER: I did not directly capture it,
8 yes, correct.

9 QUESTION: And you did not directly
10 capture multimedia?

11 ANSWER: These are all indirectly only
12 captured, yes.

13 QUESTION: So just -- I need you to
14 answer the question, yes or no.

15 ANSWER: Okay. Okay.

16 QUESTION: Okay. So the answer is no,
17 you didn't directly capture it?

18 ANSWER: That's correct.

19 QUESTION: If you would have directly
20 included them in the study, then we can agree your
21 conjoint survey method would not have worked to
22 determine the willingness of the consumer to pay; isn't
23 that true?

24 ANSWER: I don't agree with that at all.

25 QUESTION: Okay. Can you look at Page

1 174 of your deposition?

2 ANSWER: 174?

3 QUESTION: Yes, sir. And it would be --

4 ANSWER: Yes, I see it. What line?

5 QUESTION: I'm looking here, sir. Lines

6 18 through 24, sir.

7 ANSWER: Can I read this page?

8 QUESTION: Yeah, I'll read it to you,

9 sir.

10 ANSWER: Please.

11 QUESTION: On Line 18, question: Would

12 it be fair to say that if you tried to include these

13 subattributes that a conjoint method would not work to

14 determine the willingness of the consumer to pay?

15 Answer: It would make it more errorful.

16 That's what you answered at the time, correct?

17 ANSWER: Could I read this page, if you

18 don't mind? I have to just listen only to that

19 question?

20 QUESTION: I just need you to answer yes

21 or no. You testified --

22 ANSWER: Yes --

23 QUESTION: -- it would make your survey

24 more errorful. That was your testimony?

25 ANSWER: That's correct. That's what I

1 said there.

2 QUESTION: Okay. So we can certainly
3 agree that these features in the consumer's buyer's
4 guide -- the Annual Buying Guide are important to
5 consumers, right?

6 ANSWER: They are -- they are
7 considerations of some degree of importance, yes.

8 QUESTION: In your conjoint study, Dr.
9 Srinivasan, it was your objective to determine the value
10 a prospective smartphone buyer would attach to certain
11 features of the smartphone; isn't that right?

12 ANSWER: No.

13 QUESTION: Your objective in doing
14 this -- the -- the survey part of the study was to
15 determine the value --

16 ANSWER: Of only one thing. Not
17 feature -- you said feature in general. No, it was not.

18 QUESTION: But of the features you've
19 looked at?

20 ANSWER: I looked at only one thing. If
21 you -- not all features, no, definitely not.

22 QUESTION: So did you try to determine
23 the importance and desirability of different levels of
24 the 16 features?

25 ANSWER: I measured them, yes.

1 QUESTION: Okay. And you didn't survey
2 how many of the people actually were aware of the
3 notification feature before they purchased their phone,
4 did you?

5 ANSWER: I did not ask that.

6 QUESTION: And you did not calculate or
7 report the total number of Android users that actually
8 use Google messaging service, did you?

9 ANSWER: I did not ask the question with
10 respect to Google messaging. What I did ask --

11 QUESTION: Okay. I need you --

12 ANSWER: Sorry, sorry, sorry.

13 QUESTION: -- to just answer yes or no.

14 ANSWER: Sorry. I did not -- as you put
15 it.

16 QUESTION: Okay.

17 ANSWER: Google -- I did not include
18 Google messaging service as a question in my survey,
19 yes.

20 QUESTION: Your conjoint survey method
21 assumes it's okay to ask consumers to rate the
22 desirability and importance of different levels of
23 features even if they have no prior awareness of it;
24 isn't that true?

25 ANSWER: Yes.

1 QUESTION: But in the real world, if a
2 smartphone buyer is unaware of a feature when he or she
3 decides to purchase a phone, then necessarily the
4 feature would have no value to that buyer in their
5 decision to buy; isn't that true?

6 ANSWER: No.

7 QUESTION: Sir, there's no way to
8 consider a feature in purchasing a phone if you have no
9 knowledge of that feature, is it?

10 ANSWER: No, there is a way.

11 QUESTION: There is no -- so you're
12 saying if you're unaware -- if a buyer is unaware of a
13 feature on a phone, that that buyer is considering that
14 feature when they're getting ready to purchase it; is
15 that your testimony?

16 ANSWER: It comes through other people
17 from whom they hear about the phones. It doesn't come
18 directly from them, but they hear other people telling
19 that, look, when you use this phone, you will need to
20 get notifications. And so it comes in an indirect way,
21 not direct way, yes.

22 QUESTION: You have no evidence that
23 anybody in your survey had heard of a recommendation
24 from another person about the notification feature, do
25 you?

1 ANSWER: In the survey itself, I did not
2 ask that question.

3 QUESTION: And you have no evidence that
4 anybody actually heard about someone else's
5 recommendation?

6 ANSWER: In the survey, I did not.

7 QUESTION: It's well known in the survey
8 literature that if you tell someone a feature is
9 important, that the respondents may inflate the value
10 they ascribe to the feature; isn't that true?

11 ANSWER: In a -- in a general survey,
12 yes.

13 QUESTION: And in your general
14 instructions, you told respondents that all the features
15 in the study are important features, didn't you?

16 ANSWER: I can read the exact sentence,
17 but something to that effect.

18 QUESTION: And you told them that
19 research has shown that it's important?

20 ANSWER: Yes.

21 QUESTION: And you have no -- you
22 actually have no research that showed the features are
23 important, did you?

24 ANSWER: For many of them, I did.

25 QUESTION: But not for the notification

1 feature, did you?

2 ANSWER: Except in an indirect way.

3 QUESTION: You had no direct research
4 that these -- this was an important feature, did you?

5 ANSWER: I did not have any direct
6 information, yes.

7 QUESTION: In your survey, you provided
8 respondents -- let me just go ahead and hand you -- this
9 is DX 459. DX 459.

10 In your survey, you provided the
11 respondents with a more detailed explanation about the
12 notification feature than any other feature in your
13 instructions, didn't you?

14 ANSWER: That's correct.

15 QUESTION: And you also italicized
16 certain words, did you not, in your definition?

17 ANSWER: Yes.

18 QUESTION: And you didn't use italics on
19 any other instructions, did you?

20 ANSWER: I have to look at the rest of
21 them, but I can, if you wish.

22 QUESTION: You may. Take a look at
23 exhibit -- at your report if you'd like, Exhibit 6A to
24 your report, which was one of the exhibits to your
25 deposition. I believe it was Exhibit 6A.

1 ANSWER: Yeah, that's the only at
2 attribute in which there is an italics.

3 QUESTION: In your study you claim -- I
4 think you said earlier this morning that you did a step
5 to validate the quality of the respondents' answers; is
6 that right?

7 ANSWER: That's right.

8 QUESTION: And you took a survey of I
9 think you said 623 people that -- an -- with Android
10 phones?

11 ANSWER: No, no, I didn't say that.

12 QUESTION: I'm sorry. 623 total
13 respondents.

14 ANSWER: That's correct, yeah.

15 QUESTION: And of those, you considered
16 409 to have provided what you called higher quality
17 data?

18 ANSWER: That is correct.

19 QUESTION: That's about 66 percent?

20 ANSWER: It sounds approximately right.

21 QUESTION: So I think you said you are a
22 professor, correct?

23 ANSWER: Yes.

24 QUESTION: And in your class, if you
25 graded your class on a 10-point scale, what letter grade

1 would 66 percent correspond to?

2 ANSWER: This is higher -- this --

3 QUESTION: I just need an answer. 66
4 percent is what in your class if you gave them a letter
5 grade.

6 ANSWER: You are com -- comparing apples
7 and oranges, so I wouldn't give a grade on that basis is
8 the answer to your question.

9 QUESTION: Okay. So in most 10-point
10 scales, isn't it true that 66 percent -- if I scored 66
11 percent in your statistics class, that's a D plus?

12 ANSWER: D plus?

13 QUESTION: D plus.

14 ANSWER: No, I don't think so. Maybe in
15 graduate programs we give better grades.

16 QUESTION: I think you testified earlier
17 that -- that your formula 14 will yield unreliable
18 results if you try to measure the market's willingness
19 to pay for large improvement level changes in a feature;
20 is that right?

21 ANSWER: That is correct.

22 QUESTION: So do you say it only works to
23 measure small improvements and features?

24 ANSWER: So I have to be careful in the
25 wording when you say small. It is the effect of that

1 change on overall value. So it is not the change
2 itself. It is the effect of that change in feature on
3 the overall value of the product. If that change is
4 small, then the formula can be used, whereas if that
5 change is large, then this formula should not be used.

6 QUESTION: And I believe you said you
7 would be comfortable that your formula works well when
8 the impact of the improvement in comparison to the
9 overall change is on the order of 2 to 3 percent; is
10 that right?

11 ANSWER: No, I did not say that.

12 QUESTION: Let's go to 237, and we'll get
13 the whole thing. Line 17 to --

14 ANSWER: Okay.

15 QUESTION: -- to 238, Line 16. If you
16 were to do it, would you use the same denominator that
17 you used to calculate the market's willingness to pay
18 for the notification feature? And then going on -- the
19 -- the aggregate value of the dollar.

20 We had an objection in the middle. If
21 you were to do it, would you use the same denominator
22 that you used to calculate the market's willingness to
23 pay for a notification feature the aggregate value of
24 the dollar? Do you see that question?

25 ANSWER: Yes, I do.

1 QUESTION: And you answered: So this is
2 the market's willingness to pay my calculation. There
3 are multiple calculations. And you continue: And, yes,
4 that's what I would use, but I'm trying to be -- trying
5 to say earlier that the Ofek/Srinivasan formula may not
6 be quite applicable in this case because the change is
7 pretty substantial, now 10 percent. So you have to keep
8 that in mind. It's a theoretical result. And the
9 theoretical result is applicable for small changes. So,
10 for example, a feature that has like a 2 to 3 percent
11 importance, I would be comfortable -- I would be more
12 comfortable than using attribute which is like a
13 10 percent importance. Did I read that correctly?

14 ANSWER: Yeah, the word more comfortable
15 is important.

16 QUESTION: Right.

17 ANSWER: Yeah.

18 QUESTION: But you did say you would be
19 more comfortable with --

20 ANSWER: Compared to the -- the
21 10 percent, yes, uh-huh.

22 QUESTION: You have a slide that talked
23 about market willingness to pay for a phone with a
24 feature and a phone without a feature, right?

25 ANSWER: Yes.

1 QUESTION: And that was -- the feature in
2 question was one with -- one that has a camera and one
3 that does not have a camera; is that correct?

4 ANSWER: That's right, yeah.

5 QUESTION: Now, in your study, you looked
6 at the market willingness to pay for a phone that had
7 a -- that had a camera and that did not have a camera;
8 isn't that correct?

9 ANSWER: In my -- you mean in my study?

10 QUESTION: Yes.

11 ANSWER: Camera was one of the
12 attributes, I believe, yes.

13 QUESTION: And the value that you
14 attached to that was 4.8 percent?

15 ANSWER: I have to look it up.

16 QUESTION: Sure.

17 ANSWER: May I just go back to my report
18 or --

19 QUESTION: Yeah, absolutely.

20 ANSWER: Okay.

21 QUESTION: I think it was exhibit --

22 ANSWER: A-8 maybe. You are talking
23 about a video camera?

24 QUESTION: Yes.

25 ANSWER: Yes.

1 QUESTION: And what was the value you
2 assigned to that? Well, actually, it didn't -- it was a
3 -- which camera is it you're using in your illustration
4 here?

5 ANSWER: That was just a general example.
6 It was not particularly relating to the numbers in my
7 study.

8 QUESTION: So this is -- this doesn't --
9 this demonstration you did for the jury does not relate
10 to your study?

11 ANSWER: I think we are mixing up two
12 things, and it is very important I separate these out.
13 One, the market willingness to pay is a general concept.

14 QUESTION: But I'd like you to look in
15 Table A-1 of your report, and you mentioned that you did
16 study a built-in video camera?

17 ANSWER: What table are you looking at?

18 QUESTION: A-1.

19 ANSWER: Yes, and what -- built-in video
20 camera, I see it, yeah.

21 QUESTION: And so you're saying that
22 that -- that that received an attribute importance score
23 of 4.8 percent, right?

24 ANSWER: That's correct.

25 QUESTION: Which is something -- so the

1 slide that you've shown here to the jury is not
2 something you'd be comfortable using to measure the
3 value of the built-in video camera, is it?

4 ANSWER: I didn't say that.

5 QUESTION: Yeah, but you're not -- you
6 used this slide as an illustration, but it doesn't
7 relate to your study, does it?

8 ANSWER: Sir, I need to separate out the
9 idea of market willingness to pay, for which this
10 illustration is perfectly fine. But this illustration
11 is not perfectly fine with respect to formula 14. Do I
12 say -- I don't say formula 14 here anywhere.

13 QUESTION: Okay. So we're in agreement
14 that this slide is not perfectly fine for formula 14?

15 ANSWER: That's correct.

16 QUESTION: In your survey in February
17 2011 -- sorry -- in February 2012, you -- you conducted
18 your survey in this case in February 2012, I believe you
19 said; is that right?

20 ANSWER: That is correct.

21 QUESTION: And that survey was before
22 SimpleAir brought this lawsuit against Google; isn't
23 that right?

24 ANSWER: I don't know the exact date when
25 the case was brought, but that -- you -- you -- you know

1 the answer. I don't know the answer.

2 QUESTION: Your survey was conducted for
3 the purpose of being used against Apple and RIM in a
4 separate lawsuit; isn't that right?

5 ANSWER: That is correct.

6 QUESTION: And Apple and RIM make and
7 sell smartphones, true?

8 ANSWER: They do.

9 QUESTION: And they can increase or
10 decrease the prices they charge for those smartphones,
11 right?

12 ANSWER: Yes.

13 QUESTION: The price range for the
14 smartphones you studied ranged from like \$50 up to \$300,
15 right?

16 ANSWER: That's correct.

17 QUESTION: Now, you understand in this
18 case that Google does not sell smartphones that you
19 surveyed?

20 ANSWER: I want to be clear in your
21 question. Can you please restate it?

22 QUESTION: You understand that Google
23 does not sell the smartphones that you surveyed in this
24 case?

25 ANSWER: Yeah, Google itself does not

1 sell. It is -- its operating system is in -- is in
2 companies like Samsung telephones where it is sold, not
3 Google itself.

4 QUESTION: So the smartphones are sold by
5 third parties such as HTC, Samsung, and LG. We're in
6 agreement.

7 ANSWER: That's right.

8 QUESTION: And Google offers only the
9 operating system that those third parties install in
10 their devices, right?

11 ANSWER: I assume so.

12 QUESTION: You're aware that Google does
13 not charge for Android software?

14 ANSWER: That's my understanding.

15 QUESTION: And you don't know in this
16 case whether the patent at issue discusses battery life
17 as a benefit of the alleged invention, do you?

18 ANSWER: I did not study the patent
19 itself, so I cannot answer your question.

20 QUESTION: With regard to the survey that
21 you conducted, you don't know how Mr. Mills is using
22 your survey, do you?

23 ANSWER: Can you please restate the last
24 part of what you said?

25 QUESTION: Yeah. You do not know how Mr.

1 Mills, the Plaintiff's damages expert, is using your
2 survey in this case, do you?

3 ANSWER: I don't know.

4 (Videoclip ends.)

5 MR. DOVEL: Your Honor, we now have some
6 redirect.

7 THE COURT: All right. Proceed.

8 (Videoclip played.)

9 QUESTION: Dr. Srinivasan, you were asked
10 about the slide that explains market willingness to pay,
11 and you said that your formula 14 that -- said something
12 about how it applies to formula 14. Does your formula
13 14 -- is it used to calculate a market's willingness to
14 pay that is consistent with what is in those slides that
15 describe market willingness to pay?

16 ANSWER: So may I answer the question
17 with a little elaboration?

18 QUESTION: Sure.

19 ANSWER: There is the general concept of
20 market willingness to pay, and I defined it in my answer
21 to your question earlier this morning. And that
22 illustration is perfectly consistent with that. But how
23 you actually do the calculation matters. If it is a
24 large change, then you have to do it in a different way
25 as I explained to you this morning, such as the

1 so-called simulation and all that I talked about. Where
2 the change is small, then you can use formula 14. But
3 that slide is perfectly okay because it is perfectly
4 describing what is market willingness to pay.

5 QUESTION: My question, sir, is, is
6 formula 14, when it's used appropriately, will it give
7 you an answer that is the market's willingness to pay
8 that's described in those slides?

9 ANSWER: It would if the feature of
10 interest has a small effect on overall preference.

11 QUESTION: Did you -- do you have a --
12 what percentage effect does the feature that you
13 measured have on overall preference?

14 ANSWER: It is 0.3 percent, I think,
15 approximately.

16 QUESTION: Is that small enough that you
17 can use formula 14 to get a reliable answer?

18 ANSWER: I believe so.

19 QUESTION: When you say 0.3 percent, so
20 that's less than 1 percent?

21 ANSWER: Yes, it is three-tenths of 1
22 percent, much less than 1 percent.

23 QUESTION: In doing -- in applying
24 market's willingness to pay, does the market willingness
25 to pay -- is it assuming that the prices and the

1 features of all the other products in the market are --
2 are not changing?

3 ANSWER: So there are -- I have to
4 elaborate in answering your question. Of course, prices
5 and features of products change over time. That is
6 nothing that's contradicted by this formula. But the
7 formula is saying at any particular point in time, if
8 you change only one feature of one product, what will it
9 do to the unit sales and what is the compensating price
10 increase which will leave the unit sales being the same?

11 So it does not assume that somehow prices
12 and features don't change over time. They can change
13 over time for what -- whatever reason.

14 (Videoclip ends.)

15 MR. DOVEL: That concludes that witness,
16 Your Honor.

17 THE COURT: All right. Are there further
18 deposition clips to play at this time?

19 MR. DOVEL: Not at this time, Your Honor.

20 THE COURT: All right. Then Plaintiff
21 may call their next witness.

22 MR. DOVEL: Your Honor, the Plaintiff
23 calls Mr. Robert Mills.

24 THE COURT: All right.

25 MS. WILLIAMS: Your Honor, may we

1 approach?

2 THE COURT: You may.

3 Mr. Mills, if you'll come forward.

4 You've been sworn, correct?

5 THE WITNESS: I have, Your Honor.

6 THE COURT: Please come have a seat in

7 the witness stand.

8 (Bench conference.)

9 MS. WILLIAMS: Your Honor, I understand
10 that we -- that in advance of Mr. Mills being called to
11 --

12 THE COURT: Just a moment. You're going
13 to have to get closer to this.

14 MS. WILLIAMS: I understand that we are
15 supposed to approach and lodge our objection on behalf
16 of Microsoft to sealing the courtroom and -- and --

17 THE COURT: All right. This is where the
18 that confidential information is going to come in?

19 MS. WILLIAMS: Yes, Your Honor.

20 THE COURT: All right. Do you have any
21 idea how long the period of time we need to have the
22 courtroom sealed for? I assume not for his entire
23 testimony.

24 MR. DOVEL: That is correct. The issue
25 is they -- there's two things. One is the -- the -- the

1 amount that Microsoft paid. That's one item of
2 information. The other information is all on one slide.
3 It's some data about Microsoft usage. So that will be
4 -- the data about -- that -- the second part --

5 THE COURT: Is this -- is this coming in
6 together, or is this coming in two different times?

7 MR. DOVEL: No, that's what I'm going to
8 say. It's going to come actually at three different
9 times, the very beginning and that stuff is in the
10 middle, and then we circle back to the -- the amount
11 again.

12 THE COURT: How long is his direct going
13 to be in total?

14 MR. DOVEL: I'm going -- I'm going to
15 estimate an hour.

16 THE COURT: You know, I don't really see
17 anybody in the courtroom that's not part of one side or
18 the other. My inclination, just so we don't have any
19 more disruptions than are absolutely necessary, is to
20 seal the courtroom throughout his testimony. Does
21 anybody have a problem with that?

22 MS. WILLIAMS: No, Your Honor. The one
23 other -- the one other piece of -- concerning piece of
24 information is that Microsoft has asked that our
25 corporate rep, Ms. Ghosh, excuse herself if there's any

1 testimony regarding the licensing fees that Microsoft
2 pays. I believe that they are okay with the discussion
3 of -- of the -- of the amount of the settlement and
4 license agreement, but to the extent that we're going to
5 be talking -- that Mr. Dovel is going to be asking
6 questions that are going to elicit testimony about
7 the -- the per phone licensing fees and the sales of
8 that information, then Ms. Ghosh would have to be
9 excused.

10 MR. DOVEL: That will not be elicited,
11 Your Honor.

12 THE COURT: Okay. Then that's not a
13 problem. I'm just concerned about the disruptions in
14 the courtroom from sealing and unsealing and sealing and
15 unsealing, sealing and unsealing. Okay. That -- that
16 said, we'll probably take a recess before this direct is
17 finished. But I'll seal the courtroom at this time, and
18 we'll go forward unless there's something else we
19 haven't touched on. Okay.

20 MS. WILLIAMS: No, Your Honor.

21 (Bench conference concluded.)

22 THE COURT: All right. Based on the
23 agreement of the parties, the Court is going to seal the
24 courtroom given that there are some highly confidential
25 information that may be elicited at this time.

1 Mr. Floyd, I'm going to ask you as the
2 Court Security Officer to position yourself at the back
3 doors of the courtroom, and until I indicate otherwise,
4 people inside have to stay and the people outside don't
5 come in.

6 Also, I need to verify for the record
7 that there's no one present in the courtroom not subject
8 to the existing protective order entered in this case,
9 outside of the jury and the court staff.

10 Counsel for either side aware of anybody
11 present in the courtroom who would be problematic given
12 this request to seal?

13 MR. DOVEL: Plaintiff is not aware of
14 anyone.

15 MS. WILLIAMS: No, Your Honor. I do have
16 one -- one additional matter.

17 We renew our pretrial motions related to
18 Mr. Mills, Your Honor.

19 THE COURT: All right. Then with that
20 clarified, we'll consider the courtroom sealed.

21 (Courtroom sealed.)

22 *****

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CERTIFICATION

I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of my ability.

/s/_____
SHELLY HOLMES, CSR
Official Court Reporter
State of Texas No.: 7804
Expiration Date 12/31/14

____1-14-14_____
Date

/s/_____
SUSAN SIMMONS, CSR
Official Court Reporter
State of Texas No.: 267
Expiration Date 12/31/14

____1-14-14_____
Date